

**EFFECTS OF NEUROPLASTICITY BASED BRAIN GYM EXERCISES IN IMPROVING ATTENTION AMONG ADULTS**

\*<sup>1</sup>Manjula S., <sup>2</sup>Dr. P. Senthil Selvam, <sup>3</sup>Dr. S. S. Subramanian and <sup>4</sup>Dr. Kumaresan A.

<sup>1</sup>MPT, Asst. Prof., School of Physiotherapy, Vistas, Thalambur, Tamil Nadu- 600130, India.

<sup>2</sup>PHD, Prof., Hod, School of Physiotherapy, Vistas, Thalambur, Tamil Nadu- 600130, India.

<sup>3</sup>PHD, Prof. & Dean, Sree Balaji College of Physiotherapy, Chennai, Tamil Nadu- 600130, India.

<sup>4</sup>PHD, Prof., Saveetha College of Physiotherapy, Simats, Chennai, Tamil Nadu- 600130, India.

\*Corresponding Author: Manjula S.

MPT, Asst Prof., School of Physiotherapy, Vistas, Thalambur, Tamil Nadu- 600130, India.

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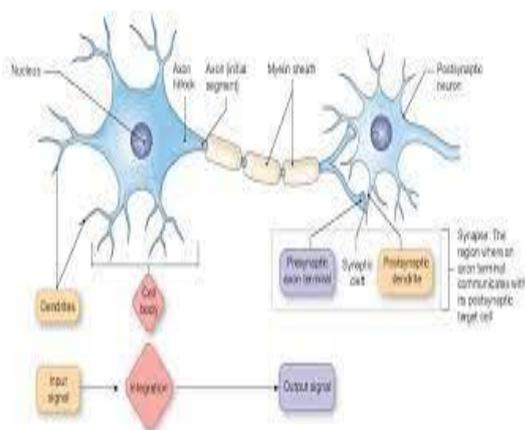
**ABSTRACT**

**Background:** Brain Gym Exercises significantly improves the attention function of the adults. There is a tremendous impact of Brain Gym on the adults, after two weeks of implementation of brain gym program. There was an increase in memory, cognitive function, concentration, attention and alertness to reduce senility or dementia. **Aim and Objective of The Study:** The main aim of the study is to evaluate the effect of neuroplasticity based brain Gym Exercises in improving attention among adults. **Need of the Study:** Attention deficit can be frustrating, but most of the time they aren't cause for concern. Age related changes are not the same thing as dementia. There are many ways to improve cognitive skills, prevent lack of attention and protect the grey matter, especially Brain Gym exercises are given to overcome such problems in adults. **Method:** 30 Subjects falling in the age of 30-40 yrs, who were noticed as suffering from attention deficit, were separated into two groups. 15 subjects included in the experimental group were given brain gym exercises and the remaining 15 subjects included under the control group were treated with brain gym exercises for a period of six weeks, one hour per day for 5 days per week. The outcome measure used was attention control scale. **Result:** The data collected were statistically analyzed by paired t-test. From the result of the statistics, it was found out that the attention span of the subjects was increased. **Conclusion:** The study concluded that brain gym exercise was more effective in improving attention among adults.

**KEYWORDS:** Brain gym exercise, cognition, attention, attention deficit, attention control scale.

**INTRODUCTION**

Neuroplasticity is the brain's ability to change and adapt due to experience. It is an umbrella term referring to the brain's ability to change, reorganize or grow neural networks. This can involve functional changes due to brain damage or structural changes due to learning.



**AIM AND OBJECTIVE OF THE STUDY**

The main aim of the study is to evaluate the effect of neuroplasticity based brain Gym Exercises in improving attention among adults.

**RESEARCH DESIGN AND METHODOLOGY**

An experimental study design was conducted with 30 samples, who fulfilled the inclusion and exclusion criteria.

**Inclusion criteria**

- Age ranging between 30-40yrs
- Both the genders can participate
- Willing to participate

**Exclusion criteria**

- Those who are having difficulty to comprehend language
- Those who are having auditory or visual disorder
- Previous history of depression or psychosis

**OUTCOME MEASURES**

Attention.

**MATERIAL USED**

➤ Mindful Attention Awareness scale.

**PROCEDURE**

It was an experimental study, where the samples were recruited based on the inclusion and exclusion criteria. Written informed consent was obtained from the samples. The total number of samples was divided into two groups, Group A and B namely experimental and control group. The experimental group were given brain gym exercises for a period of 6 weeks. Control group

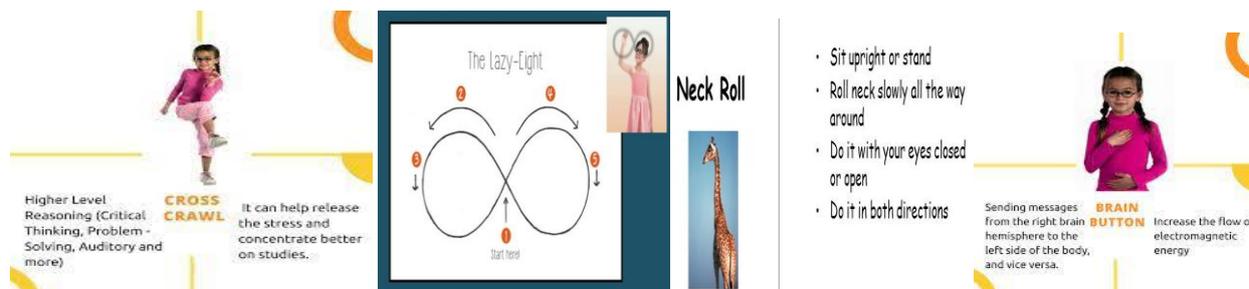
were given the awareness and training program of aerobics exercises. Pre and post test scores was analysed.

**PROTOCOL**

**Group A-Experimental Group**

**Brain gym exercises includes**

- ⦿ Cross crawl
- ⦿ Think of X
- ⦿ Laxy Eight
- ⦿ Neck rolls
- ⦿ Brain button
- ⦿ All the exercises are performed one session/ day, each for 6 min making a total of 30min



Totally Neuroplasticity based brain gym exercises were given to samples for a duration of 30 min/day under the supervision of therapist, for 5 days per week for 6 weeks.

- ⦿ Skipping
- ⦿ 2 min of warm up session and
- ⦿ 30 min of exercises for 5 days/week

**Group B-Control Group**

American Heart association recommends 30 minutes of moderate-intensity aerobic exercise five days a week or Three or four rounds of this heart-pumping workout will meet our requirement for the day.

**Aerobic exercises includes**

- ⦿ Speed walking

**DATA ANALYSIS**

Data analysis was done. Pre test and post test values of the control group and experimental group were statistically analyzed by means of t-test. The posttest values of experimental and control group were analysed by chi square test. The significance levels used for this study was P<0.05. Pre and Post test scores was measured and statistical analysis was done.

**Table 1: Experimental Group.**

S.NO	MEAN VALUE		SDVALUE		P-VALUE
	PRE	POST	PRE	POST	
1	37.86	81.73	5.30	4.15	<0.001

**Table 2: Control Group.**

Ss.NO	MEAN VALUE		SDVALUE		P-VALUE
	PRE	POST	PRE	POST	
1	37.0	62.03	5.30	5.33	<0.001

**RESULT**

From the pre and post test scores, it was evident that Neuroplasticity based brain gym exercises was more effective in improving attention among adults.

**CONCLUSION**

This study concluded that Neuroplasticity based brain gym exercises was more effective in improving attention among adults.

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