Effect of Nabho Mudra on Memory

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Introduction

Need and Significance of the Study

There is no phase of human living untouched by memory. Now, we are living in the world of 21st century which is known as the world of ‘Mental Stress’ in these circumstances. Today Frustration, Anxiety, Mental Stress etc. Mental related diseases are increasing in our society. Due to these diseases many persons including the students feels Isolation, Anger, Confusion, Depression, Mood disorders, Attention deficit-hyperactive disorder, Obsessive disorder, Adjustment disorder etc. These are the causes for memory loss of students. Under the effect of on top of Mental related disorders the level of students’ Exam’s Achievements are much low.

The training of ‘Nabho Mudra’ will increase memory level and decrease depression, anxiety of the subjects so they can achieve good results in Exam’s & much give positive effect for living peaceful life, the violent competition, peace less & rude tries for the betterment of this circumstances & for going on the top.

This study will provide something to the students like as a proper way, keeping ‘Nabho Mudra’ in teaching learning process, & Adjustment for Healthy, Clam, Fertile & Qualitative Life. It will also helpful to solve study related problems.

Objective of the Study

To enhance the memory of the Subjects.

Research Methodology

Description of Variables

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Variable</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mudra</td>
<td>Independent</td>
</tr>
<tr>
<td>2</td>
<td>Memory</td>
<td>Dependent</td>
</tr>
<tr>
<td>3</td>
<td>Brain</td>
<td>Extraneous</td>
</tr>
</tbody>
</table>

1. Mudra

The origin of the Mudras is a mystery. Mudras are not only found in Asia, but they are also used throughout the entire world. In their rituals, our European ancestors certainly were familiar with specific gestures, which they used to underline and seal what they thought and wanted to say.

What is a Mudra?

Mudra is a term with many meanings. It is used to signify a gesture, a mystic position of the hands, a seal, or even a symbol. However, there are eye positions, body postures, and breathing techniques that are called...
mudras. These symbolic finger, eye, and body postures can vividly depict certain states or processes of consciousness. Conversely, specific positions can also lead to the states of consciousness that they symbolize.

In Kundalini Yoga, the hand mudras are used during the body postures to intensify their effect. In this respect, Kundalini Yoga assumes that every area of the hand forms a reflex zone for an associated part of the body and the brain. In this way, we can consider the hands to be a mirror for our body and our mind.

“Mudras are specific body positions which channels the energy produced by asana and pranayama into the various centres, and arouses particular states of mind”. Some mudras are done separately after asana and pranayama and others are performed with asana and pranayama to help awaken the chakras.

Nabho Mudra

Nabho Mudra or Simple/small khechari—the remedy for all disease and suffering. ‘Nabho’ means ‘space or heavens and mudra means posture. So, literally it can be translated as ‘Space or Heavens Posture’. There is Sanskrit verse about Nabho Mudra:

ध्यत्र यत्र स्थितो योगी सर्वकार्येन सर्वदा ।
उद्विज्ञवः स्थिरो भूतवाधार्येकमवन सदा ।
नभोमुद्रा मवेदुष्ण योद्विना रोग नाशिनी ॥

Meaning: The yogi, who stays constant in all aspects at all times, controls the breath by placing the frontal part of tongue on the palate inside the mouth. It puts an immediate stop to all mental turmoil. All diseases of yogi destroyed by the practice of this mudra.

Technique:
- Sit in any of the yogic sitting postures such as Padmasana, Sukhasana, and Vajrasana.
- A correct and easy way of doing this is to put the tip of the tongue against the soft palate.
- Keep it there for as long as possible. When feeling uncomfortable or feel pain, unroll the tongue and relax for few seconds and again resume. Initially, we can practice it for a few minutes every day and slowly, can increase practice.

Nabho mudra has a profound effect on diseases of heart, lungs and brain and help overcome insomnia, high blood pressure, diseases of tongue, throat, eyes and is especially beneficial in all stress-related or psychosomatic diseases. The tongue position has a positive influence on the limbic system, which is responsible for our feelings and moods. It also supports the integration of both brain hemispheres. In relation to the meridian system, the tongue on the gums activates important meridians. As a result, these experience an energy lock and charge themselves more intensely.

2. Memory

In psychology, memory is the process in which information is encoded, stored, and retrieved.

From an information processing perspective there are three main stages in the formation and retrieval of memory:
- **Encoding** or registration: receiving, processing and combining of received information
Storage: creation of a permanent record of the encoded information in short term or long term memory

Retrieval, recall or recollection: calling back the stored information in response to some cue for use in a process or activity

Sensory, Short-Term And Long-Term Memory

Types of memory can be classified in a number of ways, depending on the criterion used. With duration as the criterion, at least three different types of memory can be distinguished: sensory memory, short-term memory, and long-term memory.

Sensory

Sensory memory holds sensory information less than one second after an item is perceived. The ability to look at an item and remember what it looked like with just a split second of observation, or memorization, is the example of sensory memory.

Short-term

Short-term memory is also known as working memory. Short-term memory allows recall for a period of several seconds to a minute without rehearsal.

Long term

The storage in sensory memory and short-term memory generally has a strictly limited capacity and duration, which means that information is not retained indefinitely. By contrast, long-term memory can store much larger quantities of information for potentially unlimited duration (sometimes a whole life span).

Symptoms of Good Memory

- Quick: A good memory person recalls learned things quickly.
- Accuracy: Recall should be accurate.
- To remember learned lesson for a long time: It is the feature of good memory that things be learned correctly.
- Recalling should be at right time.
- Learn any subject or lesson by means of understanding.

Causes for diminishing memory

Medication, Alcohol and illicit drug use, Stress, Anxiety, and Depression, Nutritional Deficiency, Infection, Head injury, Tumors, Underactive thyroid, Dementia, Normal Aging

3. Brain

The human brain is the main organ of the human central nervous system. It is located in the head, protected by the skull. It has the same general structure as the brains of other mammals, but with a more developed cerebral cortex.

Despite being protected by the thick bones of the skull, suspended in cerebrospinal fluid, and isolated from the bloodstream by the blood–brain barrier, the human brain is susceptible to damage and disease.
How does brain memorize things?

Are memories stored in just one part of the brain, or are they stored in many different parts of the brain?

Many scientists believe that the entire brain is involved with memory. They have argued that memory is located in specific parts of the brain, and specific neurons can be recognized for their involvement in forming memories. The main parts of the brain involved with memory are the amygdala, the hippocampus, the cerebellum, and the prefrontal cortex.

**Hypothesis**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>t-value</th>
<th>df</th>
<th>Significant level</th>
<th>H₀ is</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀: There will be no significant effect of Nabho Mudra on memory.</td>
<td>4.27</td>
<td>19</td>
<td>0.05</td>
<td>Rejected</td>
<td></td>
</tr>
</tbody>
</table>

**Sample and Sampling**

**Sample size**
A sample of 20 subjects was studied.

**Subjects**
Out of the 60 students in Purnanand Degree College, a group of 20 healthy Students were selected, each of whom was one-to-one matched for age, family atmosphere, and socio-economic background.

All selected students were aged between 17 to 22 years.

**Inclusion criteria**
All selected subjects had to be (a) matchable, and (b) healthy. Also the least students were selected.

**Exclusion criteria**
The Students health status was assessed based on their personal history; any having congenital defects or on medication known to affect cognitive abilities were excluded from the study.

**Research Design**
A pretest posttest experimental design was used to quantify the effects of practicing Nabho mudra on memory. The students who had good attendance record for last one year (more than 97 %) were selected for the practice session of Nabho mudra. There was pre-tested before practice of Nabho Mudra. Post testing was performed 26 days after the pre-test on the group. 60 sessions were given between pre and post-test. There were 2 sessions of 8 min every day.
20 adults from the college participated in the study. All students aged between 17 to 22 years. Each participant was informed of the purpose, methods, and experimental procedures used in the study. An informed consent document was read and signed by each participant before testing. A coding scheme was employed to maintain anonymity.

PGIMS by Dwarika Prasad was used to test the memory level. Memory level was tested before and after the Nabho Mudra Practice.

Tools
The entire study is based on the PGI memory scale tool which is a short, simple, objective and valid test of memory. The battery of memory tests (PGI memory scale) was constructed and standardized by Dwarika Prasad in 1977. It contains 10 subtests: 1) remote memory 2) Recent memory 3) mental balance 4) attention, concentration 5) delayed recall 6) immediate recall (sequential reproduction of sentence) 7) Retention for similar pairs, 8) retention for dissimilar pairs 9) visual retention and 10) recognition.

The purpose of this test was to examine the effect of Nabho mudra on Memory of the students. The PGIMS contains Numbers, Pictures, Things, Verbal and Non-Verbal Questions, Objectives, and short answer Questions.

Procedure
The list of Rishikesh City Institutes was taken. Among this list, Purnanand Degree College was selected purposively. After selection of College, cluster sample selection technique has used for selection of 20 college students.

Formation of The Group:
For the formation of group, attendance sheet of the students was collected. After getting the attendance sheet, a list was made into descending order and prepared group (experimental) on the base of attendance.

Application and collection of Pre-tests scores:
After group distribution, the pretest was applied collected the preliminary (initial) level score of pre-test.

Preparation and Application of Experimental force:
To examine the effect of Nabho Mudra on the dependent variable of this study; 16 min Nabho Mudra practice programme prepared (the independent variable) for 26 days through the guidance and suggestions of Yoga experts. After collection of the score of pre-test, Experimental force was applied on the students of group.

Application and collection of Post-test scores:
After application of Nabho Mudra (independent variable) practice programme on group, one-day transition period has passed before application of post-test. Later then, post-test was applied and collected its final score.

Result

Statistical Technique
The following Statistical techniques were used for the present study.

An Experimental Method was used to know the effect of Independent Variable for this study. In this Method, experimental group pre test-post test experiment design was introduced for entire study. With the help of group’s pre and post test’s score, t-test was used for calculation and testing of the hypothesis; with the help of computerized MS-Excel 2007 software.

**Result Table**

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>r</th>
<th>t-value</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>20</td>
<td>354</td>
<td>100.63</td>
<td>0.84176467</td>
<td>4.272</td>
<td>.05</td>
</tr>
<tr>
<td>Post Test</td>
<td>20</td>
<td>418.25</td>
<td>124.37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Summary of Result**

**Critical Value:** d.f. =n-1=19. The tabulated valued of t at 5% level of significance and for 19 degrees of freedom is 2.093.

Since the calculated value of t(4.272) is greater than its critical value(2.093), the null hypothesis is rejected. It means that the nabho mudra enhanced the memory of the subjects.

**Limitations and suggestions for future research**

Nabho mudra practiced during the college timing, had it been practiced between 4:00 to 6:00 am in the morning, results would be more encouraging.

Nabho mudra quiets the mind and brings on both physical and emotional relaxation, which helps reduce blood pressure, anxiety, and balances sleep disorder.

Government should encourage the research projects to enhance Memory, Reasoning ability and Yoga of urban and rural areas students. Schools should use the materials related to Nabho mudra, memory test for the students who have lower memory. The Nabho mudra is also helpful for schools curriculum and student’s physical and Psychological issues and mood disorders.

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