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## THE IMPORTANCE AND POTENTIAL OUTCOMES OF MUDRA (YOGMUDRA) THERAPY

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### Abstract:

Mudra is a symbolic gesture used in yoga. The meaning of the word *Mudra* is- 'gesture' or 'mark'. In yoga and meditation Mudras are most commonly known as hand positions, which are believed to affect the flow of energy in the body and chakras by clearing the psychic centers and energy channels. Mudra may be roughly translated as 'Mood' in English. In the Indian tradition, moods are reflected through various positions of the body, the position of the eyes, position of hands and fingers, and the breath pattern. In scientific expressions, mudras act as a tool to access and inspire the unconscious reflexes and primal, instinctive habit patterns which are originated in the primitive areas of brain around the brain stem. Mudras can be classified into the five basic categories. The categories are yogic, spiritual, curative, religious, and customary. The Yoga and Ayurveda philosophy believes that the human body is composed of five elements- fire, air, water, space and earth. As long as these elements remain in balance, a person enjoys a healthy, disease free life. A regular practice of this mudra considerably controls the level of anxiety, anger, stress, depression and even insomnia. For the present study, male and female students aged between 18-25 years were included. Yogmudra intervention was tried as per experimental design and stress, anxiety and depression level were measured using through questionnaire. Scores were recorded before and after performing Yogmudra. This was observed that regular practice of YogMudra in normal healthy person creates and improves mental toughness and reduces level of anxiety, stress and depression.

**Keywords:** Mudra, Yoga, Meditation, Stress, Anxiety, Depression

## Introduction

Rishis and Yogis after lot of in-depth study of the self, have found the sciences known as Subtle Body Science) (Sukshma Sharir Vigyan); Brahma Vidya; Science of Sounds (Shabda Vigyan); Prana Vidya; Meditation (Dhyana Sadhana), Mudra Vigyan, and various other sciences for experiencing the power of God or Divine power. Among these, the glorious science of regulating the subtle energy channels of the human body with the help of different positions of the fingers is called Science of Hand gestures (Hasta-Mudra Vigyan). This present endeavour is to discussed in this research work.

The Sanskrit word Mudra means ‘Symbol’, ‘Seal,’ ‘Mark,’ and ‘Gesture’. As per Kularnava Tantra, Mudra means that which bring forth joy or delight. Mudra may be roughly translated as ‘Mood’ in the definition in English. In the Indian tradition, moods are reflected through various positions of the body, position of hands and fingers, the position of the eyes, and the breath pattern.

Mudras are generally categorised in to following groups:

### i. Gyan Mudras

It is the most popular mudra among hand mudras. It is used in all types of practices like meditation, worship, healing, dancing etc. The meaning of the Sanskrit word “Gyan” is Supreme Knowledge. Popularly known as the “mudra of knowledge,” The practice of this mudra enhances brain



### ii. Vayu Mudras

This mudra is also called as Vayu shaamak mudra because it is useful to decrease air element within the body.



### iii. Shunya Mudras

*Shunya mudra* is a simple yoga gesture designed to decrease the space element (*akasha*) in the body. It is a *hasta* (hand) mudra, and one of a series of therapeutic mudras thought to have healing properties.



### iv. Prithvi Mudras

Sanskrit term, Prithvi means “the vast one” and is also the name of Earth. This mudra is useful to increase earth element and decrease fire element in body.



### v. Surya Mudras

It is one of the most famous Mudra in hand mudras. The practice of this mudra is useful in reducing earth element within the body.



### vi. Varuna Mudras

Varun mudra is to increase water element in the body so it is also called as a jal-vardhak mudra.



Mudras has been described as attitudes of energy flow, designed to connect discrete pranic force with Universal force. There exists a overabundance of ancient techniques associated with yoga. Yogmudra is a primeval style practiced along with pranayama or meditation. The word Mudra finds its roots in Sanskrit meaning 'gesture' or 'attitude'. Mudras represent the psychic, emotional, devotional and aesthetic gestures or attitudes [1].

In scientific expressions, mudras act as a tool to access and inspire the unconscious reflexes and primal, instinctive habit patterns which are originated in the primitive areas of brain around the brain stem. They create a subtle, non-intellectual connection with such areas. Each mudra establishes a specific link and simultaneously affects the body, mind and prana differently. The target is to generate fixed, repetitive postures and gestures which can be easily snapped by the practitioner out of natural habits and thus set up a more polished consciousness [2].

### Scope of Study

The science of mudra is an ancient science which relates to the energy flows in mind and body. Its an expression of internal feeling by ways of posturers, hands, palm, fingers, feet and body [3]. This is an integral part of yoga and a scientific knowledge of spirituality and physical wellbeing. Mudra involve the entire body, by doing mudras, subtle hand and finger movements make important connections in the nervous system and stimulate specific energy pathways. These mudras (hand postures) have potential benefits for physical, mental and emotional wellbeing [4]. There are mudras to address headaches, pain, anxiety, depression, stress, the health of lungs and heart, cholesterol, pain in any body part and almost every system of the body [5].

Mudras practice generates a perfect harmony between body, mind, and nature. Mudras practice has significant effects on obesity, cholesterol, blood pressure, diabetes, and cardiac diseases. Mudras for lung specific diseases especially asthma was highlighted in Saravanan et al.[6]. Mudra therapy enhances the physiological functions of the heart and lung and makes the body elastic, induce stem cell trafficking from bone marrow to peripheral blood vessel for potential repair and regeneration of tissues[8]. The increased hectic schedule of life generates stress and Mudra practices reduce the above mentioned hectic schedules. The specific mudras for improving the respiratory system efficiency and for curing asthma are discussed in Saravanan et al.[6].

Anxiety and Stress are individual's response to dangers or threats, real or imagined. While some degree of anxiety response is beneficial to prepare the body to cope better with the stressful condition, excessive anxiety results in deterioration in performance. Thus, one can speak of normal anxiety and pathological anxiety [6]. Pathological anxiety is an inappropriate response to a given stimulus, by virtue of its intensity or duration. It probably results from a poorly regulated or over reactive adrenergic system of the midbrain locus ceruleus, and manifests as heightened sympathetic activity [7].

Scope of Mudras can also be defined in the below mentioned points to improve the body functions:

- Concentration of mind is accomplished by mudras and regain lost energy.
- Mudras tell us the state of mind such as physical, mental and spiritual.[9]
- Deadly diseases like cancer, dementia, insomnia, diabetes, depression and minor diseases of cough and cold, vomiting, deficiency of vitamins and minerals are cured permanently.
- Mudras help to link the brain to the body, soothe pain, stimulate endorphins, change the mood and increase our vitality.[10]
- It also stimulates the brain, works on the nervous system, helps in relieving stress, improves concentration and lastly, it gives you a peaceful mind.[11]

## Hypothesis

The following hypothesis was drawn for the study:

- The 6 weeks Yogmudra interventions will have positive impact on anxiety, stress and depression level on male and female students aged between 18-25 years

## Methodologies

Human body itself comprises water element (blood), air element (breath), earth element (bones and muscles), fire element (heat), and space element (emptiness). The fingers in the hands correspond to panchaboothas and are depicted in Figure - 1. Out of five fingers, the thumb depicts fire (agni), the index finger depicts air (vayu), the middle finger depicts space (akash), the ring finger depicts earth (prithvi) while the little finger depicts water (jal). The mudras are practiced with fingers, since they are the storehouse of magnetic energy. The practice of mudras helps to balance the energy elements in the body. The mudras regulate the flow of energy elements in the body.



**Figure - 1**

For this present study Pre-test and Post-test randomized group experimental design was used. For the present study 35 male and 35 female students were selected for experimental group using questionnaire, Out of 20 questions in the Google form, the first three questions were related to personal information. The questionnaire was framed through the discussion with experts in yoga and focus group comprises of people who are aware and not aware of yoga principles. A total of 200 participants involved in the survey out of which 35 male and 35 female participants were selected and the summary of response is also shown. The following Yogmudra practices were performed by the experimental groups for six weeks including sundays and holidays. The training program was prepared for the students keeping in view to improve the selected physiological characteristics. Preparation and Gayatri Mantra: 5 minutes followed by yogmudra practice for 25 minutes and ending om for 5 minutes. In this study psychological characteristic anxiety and stress were measured pre- and post-training thorough pre- and post-experimental research method in which standardized methods have been used for collection of data. Pre-test and Post-test data of selected physiological characteristic were collected with the help of reliable tools of measurements to find out the significant difference. The data was collected with the reliable instruments and tools before and after giving the Yogmudra Intervention to the experimental group using questionnaire. Scores were recorded

before and after performing Yogmudra. For the purpose of the study, descriptive statistic (mean, standard deviation, standard error and independent t-test) as the statistical technique and the level of significance was set at the 0.05 level.

**Discussion of Result**

**Table 1: Group Statistics based on questionnaires**

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Do you have any health problem	Male	104	3.548	1.8375	.1802
	Female	34	3.059	1.7571	.3013
Do you have stress	Male	104	1.490	.5023	.0493
	Female	34	1.471	.5066	.0869
If you have stress, can you please tick the source of stress	Male	104	2.760	.9295	.0911
	Female	34	2.941	.8143	.1397
Do you think yoga practice plays a significant role in healthcare?	Male	104	1.750	.9425	.0924
	Female	34	1.588	.9250	.1586
What type of yoga practice do you prefer?	Male	104	3.260	1.7845	.1750
	Female	34	2.794	1.8054	.3096
Are you aware of pranayama?	Male	104	1.269	.4457	.0437
	Female	34	1.118	.3270	.0561
If you are practicing pranayama, please indicate your choice.	Male	104	1.827	.3801	.0373
	Female	34	1.765	.4306	.0738
Are you interested in practicing mudras done by hand for improvement?	Male	104	1.260	.4405	.0432
	Female	34	1.265	.4478	.0768
How much time can you devote to practicing yoga daily to improve your health?	Male	104	1.423	.6638	.0651
	Female	34	1.412	.6568	.1126
Are you interested in learning yoga practices?	Male	104	1.231	.4234	.0415
	Female	34	1.235	.4306	.0738
Indicate your food preference.	Male	104	1.423	.8208	.0805
	Female	34	1.647	.9497	.1629
Are you interested in following a balanced diet to improve your health?	Male	104	1.067	.2518	.0247
	Female	34	1.088	.2879	.0494
If yes, then which diet would you choose?	Male	104	1.154	.3625	.0356
	Female	34	1.029	.1715	.0294
Are you taking any medicine to improve your immunity?	Male	104	1.865	.3430	.0336
	Female	34	1.706	.4625	.0793
If yes, please specify.	Male	104	1.183	.3883	.0381
	Female	33	1.152	.3641	.0634

**Table 2: Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Do you have any health problem	Equal variances assumed	.952	.331	1.362	136	.175	.4893	.3592	-.2211	1.1996
	Equal variances not assumed			1.394	58.422	.169	.4893	.3511	-.2134	1.1919
Do you have stress	Equal variances assumed	.214	.645	.199	136	.843	.0198	.0994	-.1769	.2165
	Equal variances not assumed			.198	55.774	.844	.0198	.0999	-.1803	.2199
If you have stress, can you please tick the source of stress	Equal variances assumed	1.832	.178	-1.018	136	.311	-.1816	.1784	-.5343	.1712
	Equal variances not assumed			-1.089	63.415	.280	-.1816	.1668	-.5148	.1516
Do you think yoga practice plays a significant role in healthcare?	Equal variances assumed	1.080	.301	.873	136	.384	.1618	.1854	-.2048	.5283
	Equal variances not assumed			.881	57.097	.382	.1618	.1836	-.2059	.5294
What type of yoga practice do you prefer?	Equal variances assumed	.123	.727	1.317	136	.190	.4655	.3535	-.2336	1.1646
	Equal variances not assumed			1.309	55.629	.196	.4655	.3556	-.2470	1.1780
Are you aware of pranayama?	Equal variances assumed	18.747	.000	1.827	136	.070	.1516	.0830	-.0125	.3157
	Equal variances not assumed			2.132	76.239	.036	.1516	.0711	.0100	.2932
If you are practicing pranayama, please indicate your choice.	Equal variances assumed	2.338	.129	.801	136	.424	.0622	.0776	-.0913	.2157
	Equal variances not assumed			.752	50.904	.455	.0622	.0827	-.1039	.2283

Are you interested in practicing mudras done by hand for improvement?	Equal variances assumed	.013	.908	-.058	136	.954	-.0051	.0874	-.1779	.1677
	Equal variances not assumed			-.058	55.409	.954	-.0051	.0881	-.1816	.1715
How much time can you devote to practicing yoga daily to improve your health?	Equal variances assumed	.035	.852	.086	136	.931	.0113	.1308	-.2474	.2700
	Equal variances not assumed			.087	56.694	.931	.0113	.1301	-.2492	.2718
Are you interested in learning yoga practices?	Equal variances assumed	.012	.915	-.054	136	.957	-.0045	.0840	-.1706	.1616
	Equal variances not assumed			-.053	55.386	.958	-.0045	.0847	-.1743	.1652
If a health package of 30 minutes in the morning and evening comprising yoga is available, would you consider it?	Equal variances assumed	.514	.475	.351	136	.726	.0260	.0741	-.1206	.1726
	Equal variances not assumed			.361	59.011	.719	.0260	.0720	-.1181	.1702
Indicate your food preference.	Equal variances assumed	5.640	.019	-1.328	136	.186	-.2240	.1687	-.5576	.1096
	Equal variances not assumed			-1.233	50.125	.223	-.2240	.1817	-.5889	.1409
Are you interested in following a balanced diet to improve your health?	Equal variances assumed	.645	.423	-.406	136	.685	-.0209	.0516	-.1229	.0810
	Equal variances not assumed			-.379	50.551	.706	-.0209	.0552	-.1318	.0899
If yes, then which diet would you choose?	Equal variances assumed	19.592	.000	1.928	136	.056	.1244	.0645	-.0032	.2520
	Equal variances not assumed			2.697	118.694	.008	.1244	.0461	.0331	.2158
Are you taking any medicine to improve your immunity?	Equal variances assumed	15.095	.000	2.150	136	.033	.1595	.0742	.0128	.3062
	Equal variances not assumed			1.851	45.461	.071	.1595	.0862	-.0140	.3330

If yes, please specify.	Equal variances assumed	.701	.404	.408	135	.684	.0312	.0765	-.1200	.1824
	Equal variances not assumed			.422	56.957	.675	.0312	.0739	-.1169	.1792

The data for 104 male and 34 female students who performed Yogmudra for 25 minutes daily for 6 weeks were analyzed. The results obtained are expressed as mean  $\pm$  standard deviation Table-1. The effect of Yogmudra based on questionnaires on independent of male and female students measuring as shown in Table-2. The level of anxiety, stress and depression data shows statistically significant results after performing Yogmudra. Further Breathing Rate also showed similar results. All experimental values are significantly lower than pretest result. The study also showed that mudra increases the blood circulation to various parts of the brain and to the important junction of nerves and glands [10]. The study also indicated the beneficial effects of mantra therapy on the level of mental and physical health of an individual [11]. This was also studied that hand mudra is helpful in emergency situation where immediate medical help is not available [12].

### Conclusion

It was observed from the findings from the present study, that Yogmudra interventions decreases the level of stress, anxiety and depression to normal responses to situation of anxiety in a healthy person. A significant level of stress, anxiety and depression decrease was indicating better thinking and responsiveness in an individual. Therefore, it is suggested that Yogmudra practices is an appropriate solution for maintaining good mental health and fitness, it is helpful in reducing stress, anxiety and depression level and to deal with psycho-physiological related problems.

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