

## Effect of higher state of consciousness Thoughtless awareness on psychological health

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**Abstract-** Considerable evidence exists for the place of mind-body medicine in maintaining and improving psychological health. Among the approaches used yoga and meditation have shown to improve psychological health and stress-related disorders. However there is considerable interest generated in the development of consciousness through meditation and its preventive and therapeutic benefits. The aim was to study the short term impact of a comprehensive but brief life style intervention programme on the psychological health of participants by achieving the “thoughtless awareness state” or “Sahaja state” (an altered state of consciousness) using Sahaja yoga meditation technique. The study was carried out jointly by the International Sahaja Centre Yoga Research and Health Centre, a holistic health institute located in Navi Mumbai, and the Departments of Medicine and Psychiatry of MGM Medical College and Hospital, Navi Mumbai. The participants were from many different countries and cultures from all over the globe like USA, Canada, Australia, Africa, Europe, Latin America, Russia, the Middle East, India, Hongkong, China, Singapore etc. Some of the subjects had physical ailments like diabetes, hypertension, coronary heart disease, asthma, jaundice, arthritis, hypothyroidism and cancer, while others were physically healthy and had come to improve on their meditation methods. The intervention consisted of a two weeks indoor programme in which the central theme was to achieve a “Sahaja state” (state of “thoughtless awareness”) by practicing Sahaja yoga meditation technique guided by a group of trained instructors on an individual as well as collective basis. The 30-item general health questionnaire (GHQ-30) was administered before the start of the programme to screen for psychological disorders. On the basis of scores obtained, the participants were segregated into 2 groups. Those who were psychologically healthy were placed in group 1 and those with psychological morbidity were assigned group 2. The participants in group 2 were further administered the Clinical Anxiety Scale (CAS) and the Becks Depression Inventory (BDI) to assess the severity of anxiety and/or depression. Administration of all the 3 questionnaires was repeated after two weeks on completion of the programme, i.e. GHQ-30 to group 1 and GHQ-30, CAS and BDI to group 2. On analyzing the results it was found that there was a highly significant improvement ( $p < 0.001$ ) in the psychological health of both these groups including the so-called psychologically healthy group. This suggests that the Sahaja yoga meditation technique makes us better equipped to deal with the psychological stresses of day-to-day life since it is easy to learn and gives results quickly. It is well suited for today’s superfast lifestyle in which people are not willing to wait and expect results quickly.

### INTRODUCTION

Stress, mental tension, depression, anxiety and resultant psychosomatic illnesses have become almost inevitable companions of human life. There has been an increase in incidence of psychological disorders all over the world and unipolar depression has been reported to be the most common mood disorder [11]. WHO has ranked depression fourth in the list of most urgent problems worldwide. Anxiety, another very common psychological problem, has been selected in the socio-biological organism for its adaptive value, however excessive anxiety is maladaptive, and is pathological when persistent, and contributes significantly to the pathogenesis of not only psychiatric but also systemic disorders such as cardiovascular disease, diabetes mellitus etc [5,7,18,21]. Anxiety and depression frequently co-exist; hence it has become extremely important to reduce these psychological factors as a part of prevention and management of diseases. Among the various approaches, yoga and meditation combine the physical elements of a healthy

life with a prescription for abiding mental peace [5]. Recent years have seen a growing interest by people in the development of consciousness by attempting to achieve higher states of consciousness through the practice of meditation, and using as a tool for alternative therapy of stress and psychosomatic illnesses. Health benefits of development of consciousness meditation are complex neurocognitive processes inducing changes in psychic cortical and autonomic functions. The aggregate of these changes allow the meditative states occurring to be classified as altered states of consciousness differing from ordinary wakefulness, relaxation at rest and sleep [13, 14, 26]. The results of research on health benefits of development of consciousness through meditation in the last three decades provide convincing evidence that it leads to functional changes of psycho-physiological states in humans [2, 10, 17]. It has been found to reduce stress, fear and anxiety and enhance endurance to affective challenges and improve psychosocial coping abilities. Furthermore impressive advances made in the field of psychoneuroimmunology have further strengthened the role of mind-body interventions [12, 19]. The present study evaluates the effect of an altered state of consciousness ("Thoughtless awareness") achieved by the Sahaja Yoga meditation technique on psychological health of a heterogeneous group of patient population attending the International Sahaja Yoga Research and Health Centre. As a model of altered state of consciousness we selected Sahaja meditation which is characterized not only by a state of meditative 'thoughtless awareness' (state of consciousness without thought) but also the occurrence of an emotional state of happiness and bliss [22].

## **HYPOTHESES**

### **Primary hypothesis:**

Among patients of various health conditions, there is a difference in their general health level before and after one week of the Sahaja Yoga meditation programme.

### **Secondary hypotheses:**

1. Among patients of suffering from psychological distress, there are differences in their anxiety and depression levels before and after one week of the Sahaja Yoga meditation programme.
2. For patients who are psychologically healthy at baseline, there is a difference in their psychological well being before and after one week of the Sahaja Yoga meditation programme.

## **MATERIALS and METHODS:**

### **Study Design and Setting**

This is a retrospective cohort study done on persons attending the International Sahaja Yoga Research and Health Centre, who gave their informed consent to participate in the study and willingly completed the self-report questionnaires used in this study. The study is based on data collected from 175 subjects with ages ranging from 18 to 60 years, who attended the integrated life style programme on development of consciousness by Sahaja meditation technique. The subjects were a heterogeneous group of people from many different countries of the world including USA, Canada, Australia, Russia, the European Union, Middle east, Africa, South America, Malaysia, Singapore and Hongkong. The patients had varied complaints that included diabetes mellitus, jaundice, arthritis and cancer. Some of the patients were apparently healthy with no physical complaints and wanted to learn the Sahaja meditation technique. All of the subjects were this already aware of technique of meditation via media or were told by their relatives or friends. Some had previously tried to practice it home all by themselves but unable to achieve the characteristic state of "thoughtless awareness" and none had received individualized formally guided training in this technique of meditation. 175 subjects (97 females and 78 males) were serially recruited in this study after ethical committee clearance was obtained. A formal informed consent was taken from all participants including their expectations from this study. All subjects on psychiatric medications, with severe mental illness or with substance dependence were excluded. Further those proficient in this technique, refused to give consent, education level below higher secondary or unable to understand English were also excluded. The 30-item General Health Questionnaire (GHQ-30) was administered to all patients at the time of enrolment into the study. All those patients whose GHQ score was greater than or equal to 5 (representing subjects with psychological morbidity) were allocated to group 2 and the remaining (i.e. with GHQ score less than 5) were put in group 1 representing the psychologically healthy group. Group 1

comprised of 72 subjects (35 females and 37 males) and group 2 had 103 subjects (62 females and 41 males). 15 days later on completion of the programme, all the subjects were again administered the GHQ-30. In addition to the above, the group 2 subjects were also administered the Clinical Anxiety Scale (CAS) and the Becks Depression Scale (BDI) before and after the end of the programme, to judge the levels of anxiety and depression in them.

### The Programme

The programme consisted of an integrated package comprising of theory and practice sessions. It was administered in the form of 15 day inpatient intensive programme being interrupted by two days (one day a week) weekend breaks. The course was given individually and certain sessions were held on a collective basis. Standard care at Sahaja Yoga Research and Health Center includes daily meditation and application of Sahaja Yoga meditation techniques. A typical day of an individual receiving treatment in the health center is demonstrated in Table 1. These sessions are in addition to the routine medical care that the patient is receiving for any existing medical condition.

*Table 1- Daily activities of an individual treated at the Sahaja Yoga Research and Health Center.*

5:00 AM	Wake up, bath and individual meditation in open lawn
7:30 AM	Tea
8:00-9:00 AM	Guided meditation programme by experienced instructor. Subjects were taught how to effortlessly slip into the "thoughtless awareness" state.
9:00-10:00 AM	Breakfast
10:00AM-1:00PM	Experienced instructors interact with each subject individually and listen to their difficulties and advise them accordingly. The instructor then helps the subject to achieve a the meditative state on a one to one basis.
1:30-2:30 PM	Lunch
2:30-5:00 PM	Rest
5:00 PM	Collective cleansing technique (footsoak) and counseling on the importance of holistic approach to health
6:00-8:00 PM	Audiovisual programme and collective evening meditation
8:00-9:00 PM	Dinner
9:30 PM	Collective cleansing technique (footsoak)
10:00 PM	Bed time

There is no charge for the integrated holistic health programme and training imparted for development of consciousness. Subjects pay only for their food and stay. The integral part of the program is however practicing to achieve a higher state of consciousness through Sahaja meditation technique. This is an authentic, non-commercial, non-cultic technique that focuses on attaining the state of mental silence or thoughtless awareness. It has a standard structured approach and a clearly defined target experience. Practitioners have consistently described being able to attain and maintain the target experience. The experience is characterized by a number of features like (a) elimination of unnecessary (especially negative) thought processes (b) attention is effortlessly focused on present moment experiences (c) meditator is alert and aware (d) sense of relaxation with bliss and (e) feeling of benevolence towards oneself and others. Subjects from diverse backgrounds have found it to be easy to learn and requiring very little in terms of previous experience or natural ability. It is easy to learn and practice and free of charge. Unlike some more popular methods there are no reports of any adverse psychological effects and therefore seems well suited for research and clinical applications. (H.H. Mataji Nirmala Devi 1997)

### Criteria for exclusion

1. Age less than 18 years or greater than 60 years
2. Could not read or understand English
3. Did not give consent to be part of study
4. Persons taking psychiatric medications, suffering from severe mental illness or psychoses and those with substance dependence.

(1) Demographic data and clinical history of each patient was collected at baseline

(2) General Health Questionnaire (GHQ)

General Health status was assessed using the 30-item General Health Questionnaire (GHQ-30). The GHQ-30 was developed as a screening instrument in community setting, primary care, and medical out-patients. The GHQ can be completed in 6-8 minutes, is easy to fill and is excellent as a quick screen to help detect 'caseness'. The GHQ-30 consists of 4 subscales: somatic symptoms, anxiety and insomnia, social dysfunction and depression. The four subscales also can provide rich information than single overall score [30]. There have been 2 different scoring methods for GHQ-30. The Likert scale scoring method evaluates each item by a 4-point (0123) Likert scale from 'better than usual' to 'much less than usual'. Higher scores indicate poorer general health. The Likert scale scoring provides information for subscale comparisons. In the present study the 0011 scoring system was used to detect psychological distress. A patient with a score of greater than 5 was considered to be suffering from psychological distress.

(3) Clinical Anxiety Scale (CAS)

Anxiety was measured by the Clinical Anxiety Scale. It is a 25-item self report questionnaire. The scale is scored from 0 to 100, with the highest level of anxiety being 100. It is a relatively recently developed test derived from the Hamilton Anxiety Rating Scale (HARS). Unlike the HARS which covers the whole range of symptoms of anxiety neurosis, the CAS is largely confined to psychic anxiety and tension in the somatic musculature. The emphasis is how the patient feels at the time of rating. The scale comprises of six items – psychic tension, ability to relax, startle response, worrying, apprehension and restlessness. Reliability is good including internal consistency and inter-rater assessments. Validity appears good in correlation with other symptom measures [29].

(4) Becks Depression Inventory (BDI)

Depression was measured by the Beck Depression Inventory (BDI). The inventory is a self report questionnaire. In its original form it is tested for 21 items designed to evaluate the depression symptoms, cognitions, and physical symptoms of the participant and was intended to provide a quantitative assessment of the intensity of depression. More recently a shorter form has been developed consisting of 13 items as a rapid screening tool and also measure the depth of depression. The 13 items are sadness, pessimism, and sense of failure, dissatisfaction, guilt, self-dislike, self-harm, social withdrawal, indecisiveness, self-image change, work difficulty, fatigability and anorexia. The inventory is scored from 0 to 39 with each item being rated from 0-3 [28].

(5) Statistical Analysis

Paired t-test was used to assess whether there are any significant changes from baseline, till the end of the meditation program after two weeks, in general health in both the groups as well as anxiety and depression scores for the distressed subgroup. For group 1, the change in each question in GHQ-30 before and after meditation program was compared. Paired t-test was used to test whether there are significant changes in scores of each and every question.

### Result and Discussion

In terms of physiology there is a general agreement that practices to achieve higher states of consciousness by meditation involve a reduction in physiological arousal, reduced sympathetic activation with probably increased parasympathetic activity [3]. Several studies have shown decrease in anxiety and depression with mind body interventions [6, 8, 15, 27]. The improvement in anxiety scores in the present study is clinically relevant as the sample group represents a global population cutting across nations and continents. Psychological stress being the risk factor for many diseases makes the results seen in the present study significant in terms of primary prevention of stress related disorders. Neuroimaging studies have implicated structural abnormalities in dorsolateral prefrontal cortex, ventral orbitofrontal cortex and hippocampus as major sites of functional and structural abnormality in major depression [23, 25]. Apart from this,

in both anxiety and depression, there is malfunctioning of neurotransmitter pathways such as serotonin and norepinephrine. The mechanism by which the altered state of consciousness achieved by this meditation technique helps in reducing psychological morbidity cannot be commented upon from the present study. But Sahaja meditation technique, in which one attains a state of thoughtless awareness, may modulate the limbic system activity which via hypothalamus may modulate sympathetic activity and regulation endocrine and neurotransmitter functioning [16, 20, 24]. Conditioning of these regions by practice of this technique may help restore normal homeostatic mechanisms [1]. It has been that desired results are obtained quickly by this technique hence further studies of larger duration are needed in order to prove that it's not just a placebo response. Also comparative studies with other similar interventions are required in order to conclusively prove its superiority over them.

## CONCLUSION

The altered state of consciousness ("thoughtless awareness") achieved by Sahaja meditation can be used as adjuvant for treatment of common mental disorders like anxiety and depression. More importantly it can be used as a lifestyle modification technique for the psychologically healthy. This will enable them to cope better with the ever increasing burden of stress of day-to-day life and in turn reduce the huge burden of stress related disorders which are fast becoming the greatest killers of the 21st century [20]. Also since it is easy to learn and gives results quickly it is more suited for today's superfast lifestyle in which people are not willing to wait and expect results quickly.

## LIMITATIONS

Surveys of this nature may generate a level of expectancy in the respondents. Their enthusiasm may have biased their responses. While it is impossible to completely control this in self reported questionnaires, the researchers did emphasize strongly the need for honesty and impartiality whilst answering the questions. Though it is reassuring that the overall pattern of results follows those observed in other similar such studies. Follow up research has to be done in order to rule out placebo response and to check the durability of the effects.

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*Table 2- ANALYSIS, T-Test: Group-1 (Healthy) v/s Group-2 (Distressed)*

<i>Group Statistics</i>					
	Group	N	Mean	Std. Deviation	Std. Error Mean
GHQ Before	Healthy (<=5)	72	2.88	1.891	0.223
	Distressed(>5)	103	13.80	6.371	0.628
GHQ After	Healthy (<=5)	72	0.68	1.085	0.128
	Distressed(>5)	103	2.88	4.380	0.432

*Table 3- Independent Samples Test*

t-test for Equality of Means			
	T	df	Sig. (2-tailed) P-value
GHQ Before	-16.394	126.441	0
GHQ After	-4.894	119.388	0

There is a significant difference seen between Healthy (group 1) and Distressed (group 2) groups in respect of GHQ score before and after one week of therapy ( $P < 0.001$  for before as well as for after).

*Table 4- Paired t-Test - Group-1 (GHQ Score <= 5)**Paired Samples Statistics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	GHQ Before	2.88	72	1.891	0.223
	GHQ After	.68	72	1.085	0.128

*Table 5- Paired Samples Test*

		T	df	Sig. (2-tailed) P-value
Pair 1	GHQ Before - GHQ After	10.644	71	0

The mean GHQ score of group-1 was 2.88 before therapy and 0.68 after therapy. Thus the decrease in score is seen to be significant ( $P < .001$ )

*Table 6- Paired t-Test - Group-2 (GHQ Score >5); Paired Samples Statistics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CAS Before	9.90	103	6.197	0.611
	CAS After	3.76	103	3.569	0.352
Pair 2	BDI Before	9.46	103	7.015	0.691
	BDI After	3.07	103	4.218	0.416
Pair 3	GHQ Before	13.80	103	6.371	0.628
	GHQ After	2.88	103	4.380	0.432

*Table 7- Paired Samples Test*

		T	df	Sig.(2-tailed) P-value
Pair 1	CAS Before - CAS After	12.376	102	0
Pair 2	BDI Before - BDI After	11.946	102	0
Pair 3	GHQ Before - GHQ After	18.236	102	0

The mean CAS score of group-2 was 9.90 before therapy and 3.76 after therapy. The decrease in score is seen to be significant ( $P < .001$ ). The mean BDI score of group-2 was 9.46 before therapy and 3.07 after therapy. The decrease in score is seen to be significant ( $P < .001$ ). The mean GHQ score of group-2 was 13.80 before therapy and 2.88 after therapy. The decrease in score is significant ( $P < .001$ ). From the above analysis it becomes amply clear that intervention by Sahaja Yoga meditation not only shows significant improvement in subjects with psychological morbidity but also significantly improves the psychological health of subjects who were apparently psychologically healthy.

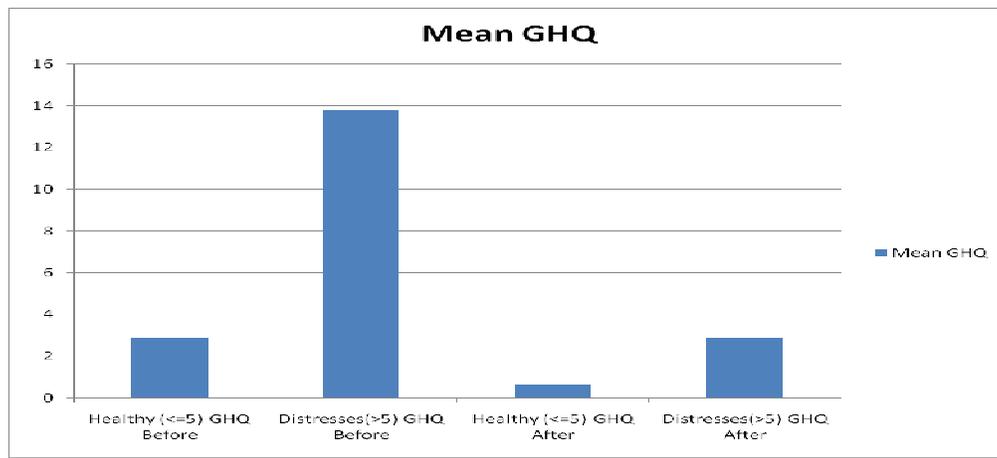


Fig. 1

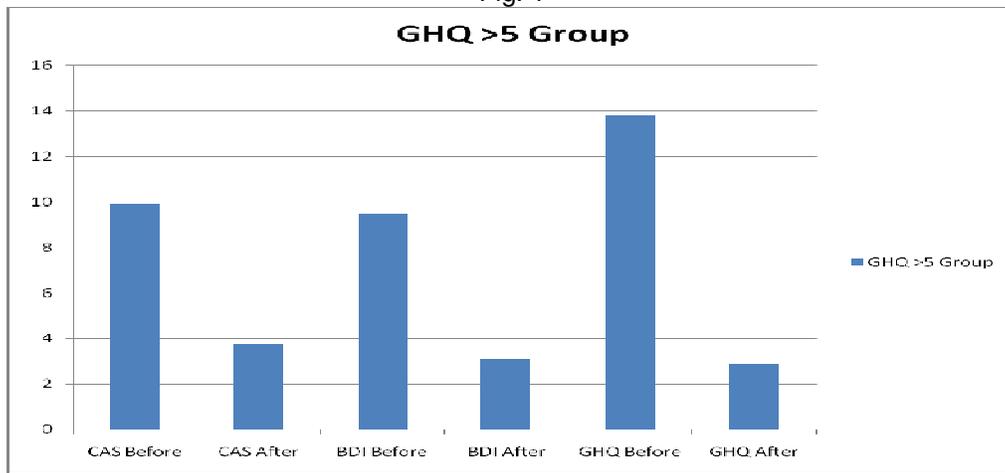


Fig. 2