

Effect Of Bhramri Pranayama On Mental Health

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Abstract

Aim of the study assign the effect of the Bhramari Pranayama on mental health 7 days Bharamari Pranayama practices was administered among ten subjects with the age range (18 to 30). The mental health inventory questionnaire was use to make snap shot of mental health. The pre and post mean compared of the same sample before and after the pranayama. The pre and post mean value of the subjects compared using paired t-test.

There was a increase in mental health inventory mean score, the mean difference of the pre and post mental health inventory is significant ($p < 0.01$). This shows the improvement in mental health by the Bhramari Pranayama.

Keywords: mental health, mental health inventory, bhramari pranayama.

INTRODUCTION

Mental Health

It is very important for the staff to be mentally healthy for doing any work in any organization. Presently employees working in the private sector due to job or other reasons are afflicted with many mental illnesses. Therefore, it is important to know about the mental health. The thing, which is mostly desired in all the societies of the world, is the need of mental health of an individual. Mental health is a potent determinant of one's integrated personality and balanced behavior identified on the basis of the level of his/her adjustment to own self, others as well as environment. The acquisition of mental health is indeed essential for a normal individual. Only then, an individual can be able to actualize his /herself, live his/her life to his/her satisfaction in the perfect tune of talking and giving something to the society. Effective management of job stress can only be achieved under two conditions. First, the individual worker must be able to recognize stressors and understand their consequences and second, organizations must develop stress prevention, as well as stress reduction techniques. Any employee can suffer from stress regardless of age, status, gender, ethnicity or disability. It is important that managers, HR personnel, safety officers and welfare staff have a clear understanding of the main issues involved with workplace stress prevention and management. Organizations have to arrange a Stress Management Program that focuses on different categories of employee's at all hierarchical level. Many situational observations of employee employer interaction identified within the organization can lead to stress at work. The concept of being healthy is extended beyond the proper functioning of the body. It means

the body and the mind is working efficiently and harmoniously. Human behavior is determined by both physical and mental factors. Mental health is a basic factor that contributes to the maintenance of physical health as well as social effectiveness. (According to Holt (1990),) In recent years, clinical psychologists as well as educationalists have started giving proper attention to the study of mental health. Mental health commutates those behaviors, perceptions and feelings that determine a person's overall level of personal effectiveness, success, happiness, and excellence of functioning as a person (Kornhauser, 1965). Mental Health depends on the development and retention of goals that are neither too high nor too low to permit realistic successful maintenance of belief in one's self as a worthy and effective human being (Lakshminarayanan et al., 1993). Mentally healthy person is firm in his/her intentions and is least disturbed by strains and stresses of day to day life. The concept of mental health has taken „Gestalt“view of individual. It incorporates the concepts of personality characteristics and behavior all in one. It may also be understood as the behavioral characteristic of the person. A mentally healthy person shows a homogeneous organization of desirable attitudes, healthy values, and righteous self-concept and a scientific perception of the world as a whole. Several psychologists like Rogers (1961), Hurlock (1972), and Erickson (1936) have expressed similar views. Over the years, a continuing matter of debate has been there on the question of how best to define mental health. The expression „Mental Health“consists of two words „Mental“and „Health“. Mental health, therefore, may refer to a sound mental condition or a state of psychological well-being or freedom from mental diseases. It is said that a sound body determines a sound mind and a sound mind exists in sound body. Mental health is ambiguous as it is not only difficult to agree on its general application, but even in a single context it may be used in many different ways (Schwartz et al., 1968). The noun mental health has one meaning that the psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment (Word Net, 2009). Wikipedia Dictionary (2010) explains the meaning of mental health as a state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society and meet the ordinary demands of everyday life. According to Longman's Dictionary of Psychology and Psychiatry (Golden son, 1984), “Mental health is a state of mind characterized by emotional well-being, relative freedom from anxiety and disabling symptoms, and coping with ordinary demands and stresses of life”. The Encyclopedia of Education (Deighton, 1971) emphasises mental health has more than simply the absence of mental illness. Rather mental health is seen as the optimal functioning of the individual and social group in all emotional and intellectual areas. Physical component of the well-being has been stressed by Stewart (1965), Maes et al. (1989), and Bryant et al. (1983). Hattler (1979) perceived intellectual health as one of the six dimensions of wellness and considers emotional well-being as an essential ingredient of wellness.

Symonds (2010) had offered the four fold concept of mental health.

1. Balance between the demand of society and the desire of the individual.
2. Maturity: The absence of infantile and childish pattern of behavior.

3. Adequate functioning: The ability of burn out/release threats and frustrating situations.

4. Compromise between inner desire of individual and the demand of the society.

The chief character of mental health is adjustment. The greater the degree of successful adjustment, the greater will be mental health of the individual. Therefore, mental health is that ability by means of which establishment of adjustment with the difficult situations of life can take place. Mental health is a state of being conducive to harmonious and effective living.

Generally mental status has two possibilities: either health or illness. Mental health is more than the absence of mental illness (World Health Organization (WHO), 2006). Mental Health includes the ability to enjoy life, resilience, balance, flexibility, and self-actualization. Positive mental health consists of protection and development and satisfying human relationships and in the reduction of hostile tensions in persons and groups. Some psychologists considered mental health as absence of mental illness. Mental illness is any of various conditions characterized by impairment of an individual's normal cognitive, emotional, or behavioral functioning and caused by social, psychological, biochemical, genetic, or other factors, such as infection or head trauma. It is also called emotional illness, mental disease, and mental disorder. Some experts consider mental health as a continuum. Thus, an individual's mental health may have many different possible values. Mental health involves positive feelings, positive attitude, and positive behavior. A mentally healthy person always does his/her work with keen interest. S/he loves her/his work this way, s/he gets excellent results. On the other hand, if a person has no interest and aptitude in his/her works, it will lead to frustration. S/he cannot accomplish any great deed. Early morning s/he takes a pledge, which s/he breaks before evening comes. Mental health is something that has to be earned. But its earning does not depend upon the individual alone. In other words, the individual is rarely capable of achieving a satisfactory measure of good mental health exclusively through his/her own personal efforts. This implies that each one also needs a legitimate measure of external help to be mentally healthy and sound to the optimum degree. The external assistance primarily comes through education both formal and informal. All educational institutions are charged with the responsibility of helping pupils in the attainment of mental health.

- **Impact of Mental Health**

- Mental health has a huge impact on every aspect of life (Hackner, 2010). Self-Image: Good mental health means appreciating one's achievements and accepting shortcomings. A mental illness can cause an inferiority complex, a negative body image and intense feelings of self-hate, anger, disgust, and uselessness, which could mutate into extreme depression, psycho-social disorders, or eating disorders.
- **Education:** Students with mental problems socially isolate themselves and develop anxiety disorders and concentration problems. Good mental health ensures an all-round educational experience that enhances social and intellectual skills that lead to self-confidence and better performance/achievement.

- **Relationships:** Mental health largely contributes to the functioning of human relationships. Mental illness can hamper even basic interactions with family, friends and colleagues. Most people suffering from mental illness find it difficult to nurture relationships, have problems with commitment or intimacy and frequently encounter sexual health issues.
- **Sleeping:** An inability to handle stress or anxiety can cause insomnia. Even if one can manage to fall asleep, he/she may wake up a dozen times during the night with thoughts of what went wrong the day before or how bad tomorrow is going to be. One may develop severe sleeping disorders which leave him/her exhausted and less productive.
- **Eating:** People with mental disorders are more prone to indulging in comfort eating or emotional binges. Finding comfort in food is something we all do from time to time. But with a mental illness, it becomes difficult to control oneself. Overeating can lead to obesity, which puts you at a risk for heart disease and diabetes, in addition to creating an unhealthy body-image.
- **Physical Health:** Mental state directly affects body. For example, stress can lead to hypertension or stomach ulcers. People, who are mentally healthy, are at a lower risk for many health complications.

Yoga in improving mental health

Yoga arose a couple of thousand years ago BC in India. It aims by means of mindful exercise, awareness of body and mind (Bock & Wapenaar, 2010; Keengan, 2001). According to Mehta and Sharma (2010) it's a complex system of spiritual, moral and physical practice aimed at attaining 'self-awareness. By definition, yoga is seen as improvement of the control of the five senses and a reduction of mental activity, eventually reaching a clear state of mind (Mehta & Sharma, 2010). Various schools of yoga exist, such as, Bikram, Iyengar, Siddha Samadhi, Hatha, Sudrashan Kriya Yoga (SKY), Silver Yoga and Sahaj Yoga. Although differing slightly from each other, all school utilize the base triad of meditation (dhyana), postures (asanas) and breathing (pranayama) to promote and restore health in mind and body (Mehta & Sharma, 2010). The postures involve standing, bending, twisting and balancing the body and consequently improve flexibility and strength. The controlled breathing helps to focus the mind and achieve relaxation while meditation aims to calm the mind (Riley, 2004). Prior information makes clear that yoga is a broad concept that uses different exercises as its method. In order to understand the mechanisms at work, it's important to differentiate these methods. Explanations based on western physiology can be summarized as the modulation of autonomic nervous tone and consequent reduction in sympathetic tone, activation of antagonistic neuromuscular systems, which increases relaxation (Riley, 2004). Yoga is considered a mind-body exercise and the underlying premise of mind-body exercises is that the physiological state of the body may shape emotions, thoughts and attitudes (Monk-Turner & Turner, 2010). A more in depth explanation of the effects of yoga can maybe be found in the working processes of mindfulness. Yoga shares in common with mindfulness, the meditative/contemplative practice and emphasis on focused attention, reduced extraneous

external stimulation, controlled breathing, and relaxation. Mindfulness based therapies are scientifically proven. Two of these are mindfulness-based stress reduction therapy (Grossman, Niemann, Schmidt, & Walach, 2004) and mindfulness-based cognitive therapy (Ma & Teasdale, 2004). Shapiro, Carlson, Astin and Freedman (2006) developed a psychological model consisting of the three fundamental components of mindfulness. These are intention, attention and attitude. Intention can be used to improve self-regulation and self exploration. Attention is the ability to observe external and internal experiences. Attitude is the way someone gives attention to the experiences in his environment. The combined effect of this triad leads to the process of re-perceiving of one's own emotions and thoughts. This creates space and has a transforming effect on health and behavior (Shapiro, Carlson, Astin and Freedman, 2006). Yoga may share the same mechanism like mindfulness, considering the similar aspects like meditation and attention on mind- body and breathing when performing postures.

Due to probable positive effects of Yoga on mental health, it has been getting more attention of the medical community with more research into its effects on mental health. Health is not a miracle or a stroke of luck (Chandra, 2001). While genetics shape health, it's conditioned by many factors that may be influenced, such as diet, exercise and stress-reduction techniques. Yoga-based interventions may prove to be an attractive option for the promotion of mental health (Pilkington et al., 2005).

Effects of yoga on mental health

Up to this day the effects found of yoga on mental health are numerous and the following are some of it, found in literature. People, who exercise yoga, frequently report a sense of deep relaxation, calm and happiness at the end of a yoga session (Monk-Turner & Turner, 2010). It increases muscular strength, flexibility, range of motion, energy and sleep quality (Pilkington et al., 2005). Yoga also improves hormone levels, immune response, cardiovascular health and respiratory functions (Pilkington et al., 2005). Five systematic reviews have shown that yoga has positive effects on depression (Cramer et al., 2012; Ten Damme, 2013; Mehta et al., 2010; Pilkington et al., 2005; Uebelacker, Epstein-Lubow et al., 2010). It is also effective for relieving stress and anxiety conditions that impact physical and mental health conditions (Long, Huntley, & Ernst, 2001). Furthermore, have positive effects of yoga been seen on well-being and satisfaction with life (Impett, Daubenmier & Hirschman, 2006). Although a lot of effects of yoga have been found, it remains a loose part. This could be more true for the effect of yoga on positive health or well-being. Not many studies were found researching the effect of yoga on well-being. This meta-analysis of yoga distinguishes itself by using a proper theoretical framework in the study on positive health and combining it with the study of a common mental illness. Reducing symptoms is just a small part in the improvement of mental health (Keyes, 2007; Seligman and Csikszentmihalyi, 2002). A dualistic view can show a more complete picture in the study and promotion of mental health. The relevance of more research in this particular area can be beneficial for prevention and better treatments for depression and is relevant to study yoga and its effects on positive health/well-being. An

early study evaluated the effect of bhramaripranayam on autonomic nervous system (Bhargava, Gogate, & Mascarenhas, 1988). After 4 weeks of practicing bhramaripranayam there was reduction in heart rate and blood pressure (both systolic and diastolic). This finding is supported by the results of a more recent study which reported similar results after 20 minutes of bhramaripranayam (Subbalakshmi, Saxena, Urmimala, & D'Souza, 2005).

Methodology**Participants:**

The study was carried out on 10 normal male students from University of Patanjali, Haridwar, India. Their age range from 18 to 30 years (Mean age = 23.72, SD= 1.79). All participants expressed willingness to participate in the experiment (Bhramri pranayama). They had similar daily routine from 6:00 am to 6:20 am. In the inclusion criteria all the participants had normal health and were not on any medication or herbal remedies. The conditions to exclude participants from the trial were any chronic illness, particular psychiatric or neurological disorders.

Study Design

All participants were given a 7- day orientation program. A session consists of 20 minutes of practice. Assessment was made on the first and last day of week of bhramaripranayam.

Assessment

A 56 questions inventory by Dr. Jagdish was executed with 24 positive and 32 negative questions subject were asked to fill all the questions in one go. Each questions has four options positive questions have weight age as 04,03,02,01 respectively for option. However negative questions has its weight age 01,02,03,04 respectively its four option. According the marks were allotted separately for each question finally the score was counted by adding all the score of 56 questions . Accordingly pre & post scores have been taken with respect to the intervention.

Interventions

Throughout all sessions, participants kept their eyes closed and followed the instructions. The mediators who participated in the study underwent a 7 day of orientation sessions where they practiced bhramaripranayam. The participants were directed to focus on the sound like bee in sweet and mellow way. For the bhramaripranayamsession, participants were given guided instructions. All session constitutes a practice of 20 min. duration.

The participants were told to sit either in the Lotus Pose with erect back and relaxed position. They were told to keep their hands either on your knees or your thighs or they can also keep them in their lap, with one hand resting on the other. They were told to breathe normally and naturally only through their nose. After this they were told to do the bhramaripranayam with every exhalation. They were told to draw the attention on ajna chakra. And continue this for next 20 minutes.

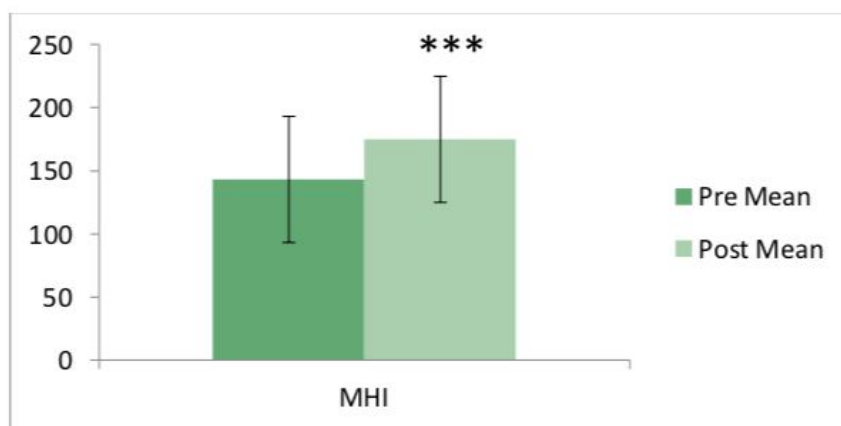
Results

Data Analysis

Table 1: Comparison of pre and post means of Mental Health Inventory score.

Variable	n	M±SD	% Change	SEM	Df	t	p
MHI Pre Score	10	143.1±14.19	18.18%	4.633	9	6.864	0.001
MHI Post Score	10	174.9±7.795					

Graph 1: pre and post change in mean of Mental Health Inventory score.



***p<0.001, t-test

The data obtained before and after 7 day orientation program of bhramaripranayam. Statistical analysis was done using excel. Data of total questions, positive, negatives and net scores of MHI (Mental Health Inventory) were analyzed using the t-test.

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