

Interventional Effect of Bhramari Pranayama on Mental Health among college Students

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ABSTRACT

Mental health as a being of well being in which individual realize his or her own abilities, can cope with normal stress of life, can work productively and fruitfully, able to make his or her community (World Health Organization, 2014). The present study is aimed to measure the interventional effect of Bhramari Pranayama on Mental Health in students. Total 60 subjects of Dev Sanskriti Vishwavidyalaya, Haridwar who enrolled in under graduate courses were selected. A mental health scale (Kamlesh Sharma 1996) was administered as a single group pre and post study. Fifteen minutes Bhramari Pranayam exercise session for 20 days used as an intervention variable in the study. Results revealed that Bhramari Pranayama intervention was found significant effect on mental health and increased level of mental health was found in post study in comparison to pre study. This concludes that Bhramari Pranayama provides a means to individual peace, happiness, develops optimism attitude, self esteem and proper coordination between mind and body.

Keywords: *Mental Health, Bhramari Pranayama*

Mental health is a term used to describe either a level of cognitive or emotional well-being or an absence of mental disorders. From the perspective of the discipline of **Positive Psychology** or **Holism**: "mental health may include an individual's ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience. Mental health is an expression of one emotion and signifies a successful adaptation to a range of demands". It has seen as fundamental to physical health and quality of life. It needs to be addressed as important components of improving overall health and well being of an individual. It is determined by multiple and interactive social psychological and biological factors just as health and illness in

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general. The World Health Organization (WHO) defines: "Mental health as a being of well-being in which the individual realizes his or her own abilities, can cope up with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community."

Man has stepped into the 21st century. Medical scientists are working with many technologies to offer better health care and this century has made rapid strides in eradicating epidemics and pandemics through inventions of antibiotic and vaccine. But, in spite of these greater than 100 years, the expected quality of life with harmony and peace seems to be far from reality. Biochemical, psycho-neuro-physiology, immunological researches are all recognizing the role of mind or matter and pointing out that lifestyle, suppressed emotions are responsible for most of the problems either social or in psychological quanta. That's why people are moving towards alternative therapies. One of these is Yoga. It is a science not less than 5000 years old and able to transform normal man to higher state of harmony and peace both as individual and social being.

The literal meaning of Yoga is "to join", "to add", "to harmonize". In Patanjali Yoga Sutra, **Patanjali** states:

"Yogascha chottvritti norodhah"- II/1

Yoga is the restraint (control, mastery) of the modifications (changes, movement, thought-forms) of the mind field. This is the most fundamental of the yoga sutras; it is the yoga definition. It defines Yoga, Union, Self realization, Mind Control and Enlightenment.

Yoga is the culmination of psyche and its stuffs. The mind consists of various ongoing thoughts and already present thought. Yoga helps in removing and culminating those thoughts from psyche. Yoga is the union of psycho-spiritual and physiological balance of one's identity (**Sandeep Singh, 2009**).

Bhramari is a sanskrit word which is derived from "Bhramar" the black Indian bumble bee. It describes the characteristic humming sound which is produced while exhaling in this breathing exercise. **Karel, Netspar and Bhuti, Swarup (2000) states that** "Bhramari Pranayama reduces anxiety, stress, aggression, insomnia, depression and very useful after neurosurgery". In Bhramari Pranayama the ear is closed by thumb, eye is blocked by fingers and forehead is pressed to vibrate with higher amplitude. So, the resonance of mind is enhanced. Bhramari forms vibrations in the brain. By these vibrations the cerebral cortex sends impulses directly to the hypothalamus, which controls the pituitary gland or the master gland.

In present study, it was tried to improve the mental health of the subjects by the yogic practice named "Bhramari Pranayama". This breathing technique is very much useful for elevating positive mood and relieving anxiety and depression. This acts miracle in person with thyroid

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problems. It releases heat from body by perspiration and gives a feeling of pleasure. This Pranayama is also useful in lowering blood pressure and regulates circulation of blood. Keeping these views in the mind, the main objective of the study was to investigate the intervention effect of Bhramari Pranayama on Mental Health in students.

Hypothesis

1. Bhramari Pranayama sessions would be improves the Mental Health of the students.

RESEARCH METHODS

Participants

A total of 60 under graduate students from various department of Dev Sanskriti Vishwavidyalaya, Haridwar, who were consented and ready to cooperate in the study were selected. The age ranges of the participants were 16 to 20 years. They were selected on the basis of incidental sampling technique. Participants who were suffering from any chronic disease were excluded from the study.

Study Design

The goal of the study was to examine the effect of Bhramari Pranayam on mental health, a single group pre and post study was designed.

Description of Variables

- Experimental Treatment/ Experimental Variable: Bhramari Pranayama (works as an Independent Variable)
- Dependent Variables: Mental Health

Material and Procedure

A Mental Health Scale (Kamlesh Sharma 1996) was used. It contains 60 items (30 positive and 30 negative statements). The scale has good psychometric properties. The split half reliability of scale has been found 0.88 and test retest reliability is 0.86. The validity coefficient with equivalent mental health checklist (Pramod Kumar 1996) was found to be 0.79.

Participants were contacted individually, a healthy rapport was established. The purpose of the study was told them and requests them to participate in study session. Participants, who were interested in fifteen minutes Bhramari Pranayam session for 20 days, recruited them. As per our study design was planned, mental health questionnaire was given. After taking their responses, participants were monitored regularly 20 days and then again mental health questionnaire was filled.

RESULTS AND DISCUSSION

The aim of the present study was to investigate the intervention effect of Bhramari Pranayam on mental health in students. An effort has been made to know the intervention effect of Bhramary Pranayam on mental health; a paired sample t test was calculated for pre and post data. Table-1 shows the effect of Bhramaryi Pranayam on mental health. The effect of Bhramary Pranayam intervention was found significant [$t = (59) 5.60, p > .01$]. Respective mean clearly shows the increased mental health score after Bhramary Pranayam intervention in comparison to pre mental health score. It means the practice of Bhramary Pranayam session increase the mental health condition of students with constant effort.

Table-1: Mean, SD and t value of students

Study Condition	Mean	S.D.	r	t-value
Pre	74.26	10.25	0.19	5.61**
Post	94.46	10.92		

Note: ** $p > .01$

The considerable evidences shows that Pranayama one's to discover the great life force, (Prana) that exists both within and around us. It is Prana that gives one energy and life. By learning to control one's breath, one can gain control over their emotions and their other mental states as well gradually becoming more sensitive to one's mind. How do one breathe also effects the heart, brain and nervous system, with the direct co-relation between the breath and anxiety, the breath is shorter, more frequent and quite shallow. The breathing patter maintains a level of arousal.

The Pranayama like Bhramari Pranayama stimulates the reflex of Autonomic Nervous System in turns the level of noradrenalin, a compound that functions as a hormone and neuro-transmitter in the nervous system, actually increase with a deeper breathe and resonates while exhaling. This secreted noradrenalin in turn helps one to decrease the level of neuro-hormones responsible for various stresses, anxiety and aroused mental state in deeper form through bio-feedback mechanism.

Limitations

Participants were selected age group and its numbers cannot be considered as totally representative of wider population. Number of days and timing of Bhramari pranayam sessions limit to generalization of study. In spite of these limitations, finding gives a progress to research of mental health.

CONCLUSION

Present study was done to investigate the interventional effect of Bhramari Pranayam on mental health. This study reveals the significance of Bharamari Pranayama & study also opens up a way to delineating the further importance of Bhramari Pranayam with mental and physical health.

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Bhramari Prayanama and Yoga could be play a vital role to improve mental as well as physical health especially for young adult, corporate, old age and patient with suffering from mental disorders in near future.

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REFERENCES

- Khare, K.C. (2002). "Role of Yoga in management of stress induced geriatric problems". "Yoga Mimamsa", Vol.34, No. 3&4 Oct-Jan, pp.262-272, (2002). *Kaivalyadham, Lonavala*.
- Kocher, H.C. (1976). "Yoga Mimamsa", Vol.18, No. 3&4 Oct-Jan (1976). *Kaivalyadham, Lonavala*.
- Kumari, Santosh, Tehal, Kohli and Devi, Batani (2005). "Impact of yogic shatkriyas and pranayama on stress".
- Palsane, M.N. (1998). "Psychological Benefits of Yoga". "Yoga Mimamsa", Vol.33, No. 2 July (1998). *Kaivalyadham, Lonavala*.
- Patanjali, Maharshi. II/1. "Yoga Darshn". *Geeta Press Gorakhpur*, pp.11.
- Rajapurkar, M.V. (1999). "Pranayama modulator of cerebral functions". "Yoga Mimamsa", Vol.33, No. 4, Jan (1999), pp.42-60. *Kaivalyadham, Lonavala*.
- Rammurti, V. (1987). "Yoga Mimamsa", Vol.2, pp. 28-39, *Kaivalyadham, Lonavala*.
- Saraswati, Swami Niranjanananda (1997). "Gherand Samhita". *Bhargava Bhushan Press, Varanasi*.
- Singh, S.K. (2009). Dissertation: "Efficacy of Special Pranayama on the Selective Physiological and Psychological factors among college going students". Dept. of Yogic Sciences and Holistic Health, School of Yoga and Health, *DSVV, Haridwar (U.K.)*, p.3.
- World Health Organization, (2014). "Mental Health: a state of well being". http://www.who.int/features/factfiles/mental_health/en.

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