

Effect of *Bhramari Pranayama* among the Poor Learning Students – a Pilot Study

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Abstract: Academic performance is concerned with quality and quantity of learning attained in a subject after a period of Instruction. Improvement in academic performance and alertness has been reported in several yogic studies. The main objective of the study was to assess the effect of *bhramari pranayama* on academic performance in relation. This study was conducted among the 65 poor academic performance students, in the period of 7 days regular monitor of their attention with the modality of stroop and word test. Pre and Post data were collected every day of *bhramari pranayama* session. Here we used the token method among all groups. Each group has been assigned for 10 min's interval to each person in a group, finally record been updated from every subject. All updated Data were analysed by spss, here we got a significant result. It shows *Bhramari pranayama* helps to improve the attention process throughout by we can improve their academic performance.

Key words: yoga, school performance, pranayama

Introduction

Learning is defined as the ability to alter behaviour on the basis of past experience. And memory is the ability to recall the past experience. Both learning and memory are closely related and, both are to be considered together. Mainly two types of learning one is Non –associative and Associative. In the first type Habituation and sensitization are the factors which is getting by constantly exposed or doing something repeatedly .In the second type of Associative learning about relation between two or more stimuli at a same time.

Learning is beginning of all stages in Memory process of perceiving, receiving into the signal pathway, restore, retrival, rehearsal, output are the stages very needed for the strong memory.

Table 1. Physiology of learning:

1. Input by learning	
2. Signalling pathway Getting into	Affected by
3. Thalamus	1. Poor concentration
4. Retrieval & Rehearsal	2. Stress
5. Store into long-term memory	3. Accumulation of more thoughts

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Scientific researchers study the effects of *bhramari pranayama* on the management of stress in adolescents. The starting point was that the processing of sensory information at the thalamic level is facilitated during the practice of *pranayama*. *Bhramari pranayama* performances were focused to bring about an improvement in persistence of attention in school students following 7 days of practice. We presumed that progress will appear because of improvement in the eye-hand coordination, attention, concentration, and relaxation.

The research done by Institute for Mind Body Medicine, Harvard Medical School, and Bruce D' Hara and his team at the University of Kentucky in Lexington, U.S., revealed a positive influence of meditation and pranayama on brain functioning and performance.

The present study examines whether there is an effect of *Bhramari* on the academic performance of adolescent students in relation to their poor concentration, stress. With this background, the present study was conducted to find the following: (1) Is there any effect of yoga on the academic performance in mathematics, science, and social studies in relation to poor concentration, stress. Science of yoga shows that pranayama (i.e. breathing practice intended to influence vital forces), work at the mental level, and intended to develop a certain type of awareness within oneself, which in turn brings about a change in emotional and visceral functions, and through them, a change in intellectual and somatic functions of the individual takes place. Increased vital capacity, acceleration in endocrinal functions, and improvement in memory.

Research subject

Academic performance is concerned with quality and quantity of learning attained in a subject after a period of Instruction. Improvement in academic performance and alertness has been reported in several yogic studies. Ability to focus attention is most needed and very complicated mechanism for learning and memory, it disturb due to so many factors like stress, poor concentration. Interference of these factors in the memory process leads to the underprivileged memory.

Bhramari pranayama helps to reduces factor which interfere with memory by producing calmness, and increase the consumption of oxygen level in the brain According to Previous Researches.

Method

The study was conducted in P.L.W.A.Hr.Sec. School, Tamilnadu. The participants were 65 including both genders, with ages ranging from 14 to 15 years. During the 7 day study Stroop-word test was administered to identify the level of the focus of attention in students. Find out the memory level of the performers by reading focus attention. This test was conducted by token method. Each group has 2 individual, and each one alert for 10 min's again 5-5 min for pre and post test. In that 2 min's for stroop test and 2 min's for word test left one minute used for scheduling Individual marks. This chart is having 5 types of colour in a rows and columns, 100 colours in a page so totally 200 colours in a sheet. In a sheet one side is reading for the stroop test i.e. Participants should read the colour as per given manner. In word test the Participants should read word of the particular colour but it should shade by other colour i.e. red colour can be shaded by blue. The scoring was done as prescribed in the manual. In these 100 words (100%) in each page of the sheet. Totally Stroop-word test contain 200 words. On the basis of their performance the mark has been alert in a scoring sheet. Participants in the research were students with poor learning academic performance with the low attention (hypervigilance).

Results

Results of the research reveal that performance of the group of poor attention students has improved after bhramari pranayama .It is found that significant at the 0.05 and It indicates differ on the gain scores between Pre-Post test of the Performers.

In which the mean of Post test (M=32.63) is found to be greater than that of Pre (M=23.44) Mean and SD's of the pre and post show the improvement on their ability to focus the attention.

When the bhramari pranayama practice perform among the poor performance students, attention and concentration of participants significantly improved. The finding of this study reveals that the students who experienced bharamari pranayama improves the behaviour and overall academics performance. Other researchers found that Bharamari pranayama improves the academic performance and enhance the problem solving ability. The XY Scatter explains the overall performance of the students during the 7 days programme. (fig:1)

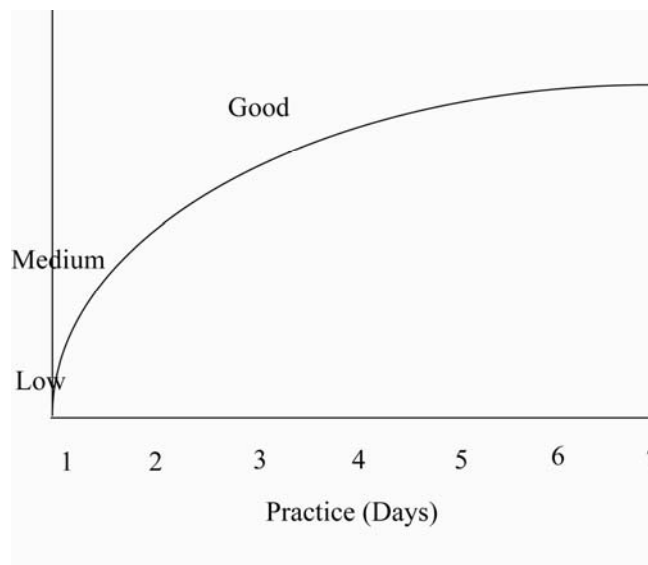


Figure 1. Performance (attention, concentration, ability to reproduce)

Conclusion

Bhramari pranayama reduces stress and other threatening factors of memory and improves academic performance. The humming bee sound correspondingly with “M” har chanting mentally causes increased alertness and this practice brings improvement in competitive performance. Further researches of the effects of bhramari pranayama practice should be made because of its beneficial influence on the population of the school students. We can conclude that practice of the certain yoga techniques can be a good instrument in improvement of the studying efficacy in children and youth, while those with attention disorders can use them as the new method to overcome these very unpleasant limitations in studying and advancement.

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