REVIEW OF LITERATURE

Sharma (2000) conducted a study on the topic “Effect of Bhasrika Programme on Cardio-Respiratory Endurance on Judokas of Inter Collegiate Level” to find out the effect of Bhasrika Pranayama on cardio-Respiratory Endurance. They studies on selected physiological variables on inter College level Judokas with a purpose to find out the effect of Bhasrika Pranayama on cardio-Respiratory Endurance. The variables selected for the study were vital capacity, peak flow rate, maximum breath holding time (Positive & negative) and Resting pulse rate. In order to study the effect endurance ‘t’ test was used. Bhasrika Pranayama practice have significantly contributive to cardio-respiratory functions, mainly pulse rate, vital capacity, breath holding time, peak flow rate and cardio-vascular efficiency. On the basis of the study it may be considered that Bhasrika pranayama could be used for training Judokas for improving cardio-respiratory efficiency.

Ross and Thomas (2010) conducted a study on the topic “The health benefits of yoga and exercise: a review of comparison studies” and said that exercise is considered an acceptable method for improving and maintaining physical and emotional health. A growing body of evidence support the belief that yoga benefits physical and mental health via down-regulation of the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system (SNS). The purpose of this article is to provide a scholarly review of the literature regarding research studies comparing the effects of yoga and exercise on a variety of health outcomes and health conditions. Using Pub Med® and the key word “yoga” a comprehensive search of the research literature from core scientific and nursing journals yielded 81 studies that met inclusion criteria. These studies subsequently were classified as uncontrolled (n=30), wait list controlled (n=16), or comparison (n=35). The most common comparison intervention (n=10) involved exercise. These
studies were included in this review. In the studies reviewed, yoga interventions appeared to be equal or superior to exercise in nearly every outcome measured except those involving physical fitness. The studies comparing the effects of yoga and exercise seem to indicate that, in both healthy and diseased populations; yoga may be as effective as or better than exercise at improving a variety of health-related outcome measures. Future clinical trials are needed to examine the distinctions between exercise and yoga, particularly how the two modalities may differ in their effects on the SNS/HPA axis. Additional studies using rigorous methodologies are needed to examine the health benefits of the various types of yoga.

Hemadri (2005) conducted a study on the topic “Physiological and behavioral responses of human subjects following japa, yagya and selected yogic exercises” and said that this study investigated the impact of Japa, Yagya, Nadishodhan Pranayama and Shavasana on diagnostic physiological, hematological, biochemical and psychological parameters of human subjects in order to find out possible remedial and preventive applications against certain diseases and psychosomatic disorders. 480 male subjects recruited from the regular visiting devotees to Shantikunj Haridwar. Four experimental group were made of 120 subjects (20 to 40 years of age) in each through randomization and randomly assigned and subjected to corresponding Japa, Yagya, Pranayama and Shavasana activities for the period of one month. Data was analyzed by using student t-test. Clinically significant effect was found in various parameters at .01 levels implies that Japa, Yagya, Nadishodhan Pranayama and Shavasana can be very effective as preventive tools against certain diseases.

Singh (2006) conducted a study on the topic “A study in Effects of selected Yogic Practices on Physical and Psychological Variables of Deaf and Dumb Children” to find out the effects of selected yogic practices on physical and psychological variables of deaf and dumb
children and second to find out the effect of selected yogic practices on physical and psychological variables of different are group 14 to 20 years. In the present study random sampling procedure was followed. A group of 100 deaf and dumb children was selected randomly from the Mata Prakash Kaur Hearing & speech Handicapped Welfare Center, Kamal and Rotary Club School for Deaf, at Ambala (Haryana). These students went through yogic exercises (for nine week) through training programme under strict supervision of the researcher and deaf and dumb teacher. However, for present study 100 students were selected from the students studying in these schools. The age group ranged from 14 to 20 years. These students were equally divided in two groups, each consisting of 50 students. Experimental group practiced following asana and Pranayama during the training i.e. Asana (Uttanpadasana, Sarvangasana, Halasana, Matsyasana, Chakrasana, Ustrasana, Suptvezrasana, Ardhamatsyenderasana, Padmasana, Vazerasana) Pranayams (Anuloma Viloma, Surya Bhedana, Chandra Bhedana, Shitali, Sitkari). The students were taught yogic practices (for nine week) through programme under strict supervision of the researcher and deaf and dumb teacher. However, these students were equally divided in two groups, each consisting of 50 students forming experimental and controlled group. Data was analysed by using student t-test. The result indicated statistical significant difference on physical and psychological variables. Amongst the physical variables of experimental group has recorded, statistical significant difference (P< .01 and P <.05) in their levels on Eight Pound Shot put test and Bend and reach test with t-2.25, 3.79, respectively. While no statistically significant difference have been observed between post test mean scores of experimental group and post test mean scores of controlled group on other physical variables i.e. Zigzan runtest and TMT. Experimental group has shown statistically better results on psychological variables as compared to physical variables i.e. self confidence, over all
adjustment, emotional stability, intelligence and mental health are found statistically significant with \( t = 2.20, 2.30, 3.37, 4.88 \) and 3.76 respectively which is significant at .05 and .01 level respectively. It is found subjects of experimental group significantly improve their physical fitness and psychological status, since the result indicated statistical significant difference on physical and psychological variables.

Sisodia (2000) conducted a study on the topic “Effect of Transcendental Meditation on selected Physiological Variables and Co-ordinative abilities in Judo” to find out the effects of Transcendental Mediation on selected physiological variables and coordinative abilities in Judo. Sixty Judokas studying at various standards at L.N.I.P.E. and Jiwaji University, Gwalior were selected as subject for the present study. The variables selected for the study were reaction ability orientation. Different balance and Rhythm ability and physiological variables. An aerobic power, vital capacity, resting respiratory rate, resting heart rate, body composition, ‘t’ test on all the subjects was applied. In case of an aerobic power performance, transcendental mediation had not shown significant improvement among experimental groups as compared to the control group. In case of total body fat percentage, transcendental mediation had shown insignificant change in comparison to non-meditations. The balance ability improved significantly as compared to control group. With regard to lean body weight transcendental mediation was found to be ineffective for experimental group as compared to control group.

In study conducted by Boon (1977), the relationship arousal and anxiety with gymnastic performance was investigated. Pulse rate and palmer sweating were utilized as indicators of arousal. Anxiety was assessed by means of the state-Trait Anxiety Inventory. The Ithaca college woman’s varsity gymnastic team (N =18) was tested during 1973-74 season. The inter correlation matrix of all variables pulse rate, palmer sweating, state anxiety, trait anxiety and
gymnastic performance revealed limited relationship between gymnastic performance and arousal/anxiety measures.

Dominikus et al. (2009) have examine the relationship between mental skills and anxiety interpretation in secondary school hockey athletes. There are 108 participants (54 male, 54 females) age between 14 and 17. This participants are athletes from 3 secondary school. The average age of participant is 15.17 (SD= 1.18). The results indicated that the direction of anxiety interpretations between the male and female athlete are the same but different in terms of intensity (cognitive anxiety interpretation direction somatic anxiety and self-confidence). Based on the predicted mental skills of athletes it was concluded that self belief (M=1.54 for males and M = 1.06 for females) was seen as the motivating factor or facilitative to the performance of the athletes. There was also difference on how mental skills are related to anxiety intensity and self-confidence. Recommendations for future research were also suggest.