INTRODUCTION

Discus throw is the oldest field event now becoming very popular and many athletes are participating in this event. This event is included in the track and field and athletes need to develop explosive strength, physical fitness and technique to achieve success. The players have to maintain coordination between lower and upper body. The athletes are required to improve various aspects of physical fitness and techniques in order to succeed in discus throw. Additionally, discus throw event demands high power production. Further it has been evident from previous studies that explosive power of muscles, speed, balance and coordination are important factors for performance. Moreover, it is evident that discus thrower need mastery over controlled breathing to exhibit top performance. Breath is a natural phenomenon and takes care of itself subconsciously. However, controlling it consciously during certain moves can increase power which in turn will prevent injury. Furthermore, pranayama or controlled breath, which is an important aspect of yoga, activates cardio pulmonary functions which are necessary for improving performance. Hence, in this study researcher intend to see whether breathing exercises and pranayama can be effective in altering morphological, physical fitness, psychological and physiological components of discus thrower.

METHODOLOGY

For this controlled experimental trial eighty male athletes aged 18-120 years were randomly divided into four groups. The training interventions were implemented for 12 weeks on three experimental groups (viz., breathing exercise, pranayama practices, breathing plus pranayama) and one comparable control group. During pre- and post- tests, the variables measured were morphological (viz., body height, weight, BMI, girths of arm, chest, thigh and calf), physical fitness (viz., shoulder strength, explosive power of leg muscles, strength of abdominal muscles, flexibility, breath-holding time and balance), psychological (viz., sports anxiety and mental health), physiological (viz., resting pulse rate, blood pressure, and respiratory rate) and performance in Discus throw.
**Statistical Analysis**

Analysis of covariance followed by post hoc analyses was utilized to find out the efficacy of pranayama on selected variables.

**RESULTS**

In morphological variables the results showed significant improvement body weight, body mass index, arm girth, chest girth, thigh girth, and calf girth in both breathing exercise and pranayama training group. However, there was no significant difference in height of athletes among all the groups. In physical fitness variables the results revealed that shoulder strength, explosive power of leg muscles, strength of abdominal muscles, flexibility, breath holding time, and balance was improved after twelve weeks of pranayama training and breathing exercises. The pranayama and breathing exercises was found to be effective in reducing sports anxiety and improvement in mental health. Pulse rate, blood pressure and respiration rate was maintained at optimal level after practice of pranayama and breathing exercises. Further, performance in discus throw was also improved in pranayama and breathing exercise group participants.

**CONCLUSION**

From the results it was concluded that breathing exercises training alone could not help the Discus thrower for associated variables of Discus throwing performance; Pranayama training alone contributed to improve almost all the associated variables required for improvement in Discus throwing performance.