

# Thematic Analysis of Physiological and Psychological Benefits of Pranayama on the Performance of Athletes



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## Abstract

Breathing is very essential for our survival as it is only way we can send oxygen inside our body and into our organ. We can live for few days or month without taking food and days without water, but we cannot live a few minutes without breathing. Breathing is very essential for every living thing in the universe. Mastering the art of breathing is a important steps towards self healing and survival. Pranayama is a Sanskrit word and combination of two words "Prana and ayama". Prana means "vital" force. It also signifies life on breath. Ayama means to extend or draw out the breath. Pranayama is very essential for every human being in the world and it is also play a vital role in the field of games and sports. Regular practice of Pranayama is very effective for sportsmen on the field and off the field. Pranayama techniques are beneficial in treating a range of stress related to sports and also improve the automatic functions. Pranayama help to improve cardio – respiratory system including lower blood pressure. It also helps to reduce weigh which is very effective in sports. Stress, depression and hypertension can be easily relieves with the regular practice of Pranayama which is very effective in the field of games and sports. Pranayama helps to keep away the heart related problems and also give relaxation for the body and mind during the training and competition period. On the whole we can say that it is very beneficial for sportsmen in physiologically and psychologically.

**Keywords:** Breathing, Pranayama, Stress, Concentration, Athletes.

## Introduction

Pranayama is an old discipline designed to bring balanced and health to the physical, mental emotional and spiritual dimensions of the individual. Pranayama exercise are useful in integrating mind and body.

Hundreds year ago yoga originates in India, and at present time every sports man in awarded about the benefits of yoga. It is a natural remedie to keep fit and healthy. With the help of yoga and Pranayama people has been proven that it is an effective method to prevent and management of diseases.

Yoga is long popular practice in India that has become increasingly more common in western society. The word "Yoga" is derived from Sanskrit word (Yuj) which means union, joining or connection. It is a union of Atma and Parmatma. It is the fusion of healthy body with a disciplined mind for the purpose of spiritual development. Yoga is a union of our individual consciousness with universal divine consciousness in a super conscious state known as Samadhi.

Book of human kind, Rigveda, mentions about yogic meditation by the wise, while Yajurveda exhorts us to practice yoga for enhancing mental health, physical and prosperity. Yoga is an inseparable part of the Indian culture. It has come down to us from antiquity, with an unbroken tradition. Integration encompasses putting together and controlling the same judiciously. Pranayama and Samadhi related terms which are mentioned in Bhagavad Gita. A growing body of research evidence supports the belief that certain yoga techniques may improve physical and mental health through down regulation of the hypothalamo pituitary adrenal (HPA) axis and the sympathetic nervous system. The stress and stress induced disorders like hypertension and anginba are fast growing epidemics and bone of "Modern" society. The holistic science of yoga is the method for prevention as well as management of stress and stress induced disorders. Numerous studies have shown yoga to have an immediate down regulating effect on both the (HPA) axis responses to stress.

Yoga significantly decreases heart rate and systolic and diastolic blood pressure. These studies suggest that yoga has an immediate quieting effect on the HPA axis response to stress. While precise mechanism of active has not been determined, it has been hypothesized that some yoga exercise cause a shift towards parasympathetic nervous system dominance, possibly via direct vagal stimulation.

A proper exercise of yoga and Pranayama prepares the body and the mind of yoga. Practitioner to make spiritual progress. The spiritual aspect is basically the control of the mind and self realization. Yoga does not deal only with mental and physical techniques of self development, but also with direct control of the inner energy such Pranayama. Pranayama is one of the most important features of yoga. This is mainly the regulation of 'breath' when one inhales air from one part of the nose and exhales it from the other. The most of the researcher studies claims that a regular practice of Pranayama can prevent and care fatal diseases like cancer, heart ailments, diabetes, blood pressure, liver disorders and serious gynecological problems.

Present lime Pranayama has involved as an alternative system of medicine. Day by day people shows their interest to practices Pranayama. They are doing yoga exercises daily early in the morning regularly. Practicing Pranayama systematically they have benefited a lot.

In patanjalis "Astanga Yoga" Pranayama appears at the fourth stage. This means unless one observes yama-Niyama and does asamas well, he cannot reach this fourth stage. Therefore, for doing Pranayama it is not enough to have done the Asanas as mentioned here. Even after learning these asanas and having practiced them one needs some preparation before actually taking up Pranayama. The breathing process chiefly involves two activities to understand the process of breathing.

The breathing process chiefly involves two activities that is inhaling. This process is called "Puraka" and the later "Rechaka" in Yogashastra. These two activities continue non stop right from the birth to deth of a person. The state when these two activities are made to halt is given the name "Kumbhaka" in yoga studies. The halt after inhaling i.e. Puraka is called "Abhyantara Kumbhaka" and after exhaling i.e. rechaka.

#### **Objective of Pranayama**

Pranayama aims in sports primarily at the control on the mind during the stress of competition and training periods when the mind is under the stress of competition or training period, it remains unaffected by disturbing thoughts. On the whole we can say that the aim of the study is stress is a dangerous and significant problem of games and sports, which affects physical, mental, behavioral and emotional health. Pranayama and yoga has been reported to control stress, to be beneficial in treating stress during the competition and training period, improving autonomic functions, lower blood pressure, increase strength and flexibility of muscles, improve the sense of well being and improving spiritual growth. In general we can say that Pranayama is very useful in preventing as well as

cure of many stress related and psychosomatic disorders such as hypertension anxiety, insomnia, asthma, diabetes, heart burn etc.

#### **Methods and Material**

1. The smooth breathing that continuous naturally without any effort (quiet breathing).
2. The protracted breathing which is caused by deliberate slowing down of the breathing (deep breathing).
3. The quick breathing which is caused by deliberate increase in the speed of breathing (fast breathing).

#### **Type of Pranayama**

1. Keep both the nostrils open and then inhale and exhale with both nasal passages. This type is nothing but quick breathing with both the nasal cavities. One should inhale and exhale with as much speed is possible and for as much time as feasible.
2. Take up Pranava Mudra and close the right nostril with the help of the thumb of the right hand, and the same nasal passage.
3. In this type left nostril is to be closed and the quick breathing is done with the right nostril.
4. In this type close the right nostril, and inhale with the left nostril and then immediately close left nostril and exhale with the right nostril.

#### **Review of Literature**

According to article by Abhinamyoga, Breathing is essential since this is the only way for you to send the "oxygen" inside the body and to other organs. People can survive the months without having a food on their play, but they cannot do this without water. However, it is good to take note that they cannot "survive" several minutes without breathing.

Total yoga, Organisations say that regular practice of Pranayama activates the parasympathetic nervous system. Which significantly lower their systolic and diastolic pressure. There by, lowering the heart rate. Also it relaxes the muscles which in turn helps us feel relax and peaceful.

Essential of physical education by (Ajmer Singh) Pranayama is called the soul of yoga.

Breathing is necessary for purifying the body similarly, Pranayama is essential for purifying the mind. Just as gold and other metal melted in the fire become pure so also the sense organs of the body get rid of impurities of Pranayama. The objectives of Pranayama are to strengthen the nervous system. It also increases the concentration power of mind.

#### **Aim of the Study**

The study aims at assessing the physiological impact Pranayama yoga on Cardio respiratory function of a young athlete.

Benefits of Anulom Viloma:

1. With this Pranayama you will instantly experience peace and blissfulness as though you were transported into a new word.
2. It is said in the yoga science this Pranayama cleanses 72000 nadis or channels in the body.
3. It helps purify the blood and the respiratory system.

4. IV: The deeper breathing enriches the blood with oxygen as a matter of fact large amount of oxygen goes to the brain, lungs, heart and capillaries.
5. It balances and calms our nervous system so when stressed this is extremely beneficial.

**Physiological values of Pranayama**

1. Pranayama soothes the nerves and tones the entire system.
2. It increase digestive power, invigorates the nerves and cleans the sinuses.
3. The blood receives a large supply of oxygen one feels refreshed. The nerves are calmed and purified.
4. Pranayama activates and invigorates the liver, spleen, pancreas and abdominal muscles.
5. Pranayama cools the system and soothes the eyes and ears.
6. It benefits persons suffering from low blood pressure and high blood pressure.
7. It keeps the body healthy.
8. It purifies tabular channels and removes sluggishness from the body.
9. The constant practice Pranayama rouses spiritual power. It gives spiritual joy, spiritual light and mental peace.
10. It purifies the blood.

**Discussion**

Present study confirmed the positive effect of Pranayama on cardio respiratory system of young athletic. This study shows that Pranayama plays a vital role and considered much helpful for young growing athlete for enhancement of their inner organs strength.

**Conclusion**

Pranayama helps in control though while playing. During the competition many thought run though the mind of athletes about the next move and what needs to be done on the spot if things do not go as planned athlete can easily get under stress and ultimately he lose. Through regular practice of Pranayama athlete can achieve focus and deciliter the mind of thoughts, which aids the athletes to go though each thought one by one and act accordingly. It also increases the supply of oxygen to the blood and expels the toxins, hence purifying the blood. In the

whole we can say that it strengthen the nervous system and also increase the concentration power of mind. It also improves 8 physiological function of the sportsmen and also makes the sportsmen psychologically strong to face every situation on the field and off the field.

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