



Narrative review on need and usefulness of yogic practices for overall fitness of athletes

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Abstract

Sports is the combination of team and individual games. These games are physically and mentally tough for their stiff competition. To achieve the objectives of games athletes needs to fulfil and maintain their fitness components. Yoga is a holistic way of living which includes physical and mental well being techniques. Yogic practices are mainly based on stretching, deep breathing and relaxation techniques which helps to improve human well being and fill with joy. Objectives of this study is to review and explore the yogic practices for the physical fitness and psychological factors of athletes. To fulfill the objectives of this study, google scholar, PubMed and google search engine is use. As the selection criteria for scientific articles physical fitness, motor fitness, mental health, mental wellbeing, yoga and sports performance keywords are use. This review study shows that yogic practices make athletes introvert and calm and enhance their physical and mental fitness criteria.

Keywords: Physical fitness, Motor fitness, mental health, mental wellbeing, sports performance and yoga

Introduction

Sports is the combination of individual and team games. Each game has its own rules and regulations and its own fitness criteria. These games give a very busy life and stiff competition among players (Kaur, 2015) ^[17]. The main aim of sports is to improve human physical development through physical activities (Joniton *et al.* 2024) ^[16], which makes a person extrovert and aggressive and increases many physical and psychological health issues. To achieve the physical fitness and eliminate the mental problems practice of Yoga is essential in the field of sports.

The word “YOGA” is derived from Sanskrit root word “YUJ” which means to union or join. Yoga is an ancient practice to join or promote the physical and mental wellbeing of human. It is a harmony between mind and body (Thangapandiyam & Mahaboojan, 2018) ^[29]. Yoga makes a person introvert and calm (Kaur, 2022) ^[17]. It is mentioned in yogic scriptures that yoga is the only solution to balance the mental, physical and spiritual aspect together. Yogic practices raise human from lower level and take him in the path of liberation. In Indian medical system many practices are given for better mental health but in all that Yoga is considered as appropriate method to gain better mental and physical health. Yoga is a systematic way of teaching which impacts on the physical, mental, spiritual wellbeing of a person (Kaur, 2022) ^[17]. Yogic practices are based on the Yama, Niyama, Asanas, Pranayama and Dhyana that can play a key role to control the mind and gives high concentration which helps an athlete to perform his highest performance (Saini & Lahange 2017) ^[23]. Objectives of this study is to review and describe the role and usefulness of yoga in sports.

Role and Usefulness of Yoga in Physical Fitness of Athletes

Fitness is the potential of a person to live healthy, enjoyable, practical and creative life (Arafat *et al.* 2020) ^[2]. Physical

Fitness criteria of the athletes can be classified into two categories – (i) health related fitness components and (ii) motor fitness components. Health related fitness components apply to everyone and they determine the potential of an individual to perform his day-to-day activities whereas, motor fitness components are goal oriented and directly related with the goals of game (Dabas, 2017) ^[8].

Main components of physical fitness are: Flexibility, Speed, Agility, Power, Muscular Strength, Muscular Endurance, Cardiovascular Endurance and Balance (Dabas, 2017) ^[8]. To achieve the objectives of game an athlete required to be fit and balanced and needs to fulfil these components.

According to Yoga practice of Yogic Asanas and Pranayamas plays an important role to enhance these physical fitness components in athletes.

1. Flexibility

Flexibility refers to the ability of muscles, joints and tissues to move freely or pain free range of motion. Asanas (Physical postures) like- *Trikonasana*, *Padhastasana* (Jadhav *et al.*, 2020) ^[14], *Bhujangasana*, *Pashimotanasana* (Sridar, 2022) ^[26], *Ardhmatyendrasana* (Chaudhari, 2019), *AdhomukhSavanasana* etc., are useful and plays an important role to enhance flexibility.

2. Speed

Speed is the capacity to move rapidly from one end to another or to represent a certain movement in the shortest possible time. *Adhomukhsavanasana*, *Ardhchandrasana*, *Buddhkonasana*, *Virbharasana* (Jadhav *et al.*, 2020) ^[14] are useful to enhance speed components.

3. Agility

Agility defines as the capacity to change position in speed. It obsessed with balance, coordination, strength and skill

level. *Tadasana, Padhastasana* (Jadhav *et al.*, 2020) ^[14], *Ustrasana, Setubandhasana, Sarvangasana* (Jana, 2018) ^[15] etc. are useful to improve agility.

4. Power

The ability to use muscular strength quickly to generate force is called power. Practice of *Suryanamaskar, Tadasana, Sarvangasana, Chakrasana* (Bhatti & Singh, 2023) ^[14], *Adhomukhsavanasana* etc. are useful to enhance power.

5. Muscular Strength

The ability of a muscle or group of muscles to apply greatest strength throughout the time of contraction. Practice of *Suryanamaskar, Bakasana, Mayurasana* (Rathi, 2019) ^[22] *Dhanurasana, Salabhasana, Sarvangasana* (Ganguly, S.K) are useful to improve muscular strength.

6. Endurance

The capacity to perform sports activities with standard under the state of fatigue is known as endurance. Practice of *Suryanamaskar, Ustrasana, Bhujangasana, Setubandasana* (Jana, 2018) ^[15], *Virbhadrasana, Dhanurasana* (Jadhav *et al.* 2020) ^[14] etc. are useful to build endurance.

7. Balance

Balance is the ability of an athlete to remain in control of his body position. Balancing postures like *Tadasana, Katicharasana, Vrikshasana, Natrajasana* (Saraswati, 2017) ^[28] are helpful to improve balance in an athlete.

8. Cardiovascular Endurance/ Fitness

Also known as Cardiorespiratory fitness. It refers to the capacity of the body to transport oxygen to muscles, organs during physical activities. Practice of Pranayama helps to improve the cardiovascular fitness of an athlete (Dabas, 2017) ^[8].

Role and Usefulness of Yoga in Psychological State of Athletes

Psychological factors of an athlete play a significant role in game. These factors like aggression, depression, anxiety, eating disorders, mental toughness, will to win, positive aptitude, sleep pattern, self-esteem, self-confidence etc. are directly affects the performance of an athlete or the reason of their success and failure.

In the recent years mental problems of sports person increases due to their high level of competition of winning ability, overtraining, gaining social fame, aggressive nature etc. (Rathi, 2019) ^[22]. To eliminate these problems athletes are using drugs, doping etc. which is harmful for them. In sports physical challenges leads to the psychological challenges, if an athlete has any physical problem like injury, it can be the reason of his mental problem. Coaches and athletes identically searching for complete advantages that are typically led to the development of physical training but mental training is also an important part of an athlete's life. (Singh *et al* 2015) ^[25].

The American College of Sports Medicine (2021) stated that student athletes face pressure from academics and approximately 30% women and 25% men student athlete report having mental problems and also state that professional athletes also face mental health challenges and

approximately 35% of elite athlete facing or suffer from mental problems.

To achieve the highest peak performance an athlete needs to be mentally calm, fit and motivated, if not he'll be never achieving his objectives. According to Yoga human mind and body both are adversely affects each other. One's working process directly affects the another's working process. According to yogic perspective to control the mind or being mentally fit firstly practice of Yama and Niyama are essential. Yama means the social discipline which includes – *Ahimsa, Satya, Asteya, Brahmcharya and Aprigraha* and Niyama means the self-discipline which includes – *Soucha, Santosh, Tapa, Swadhyaya and Ishwarpranidhana*. Another practice of yoga for mental stability and calmness is Asanas, Pranayama and Meditation. Practice of Balancing Asanas along with breathing awareness makes a person gently calm (Jadhav *et al.* 2020) ^[14]. Practice of Pranayama detox and cleanse the *Nadis*, increase oxygen level in the body, boost blood circulation in whole body, gives relaxation from mental problems etc. (Saraswati, 2017) ^[28]. practice of Dhyana (Meditation) gives long mental stability and calmness which makes a person introvert and happy (Kaur, 2022) ^[17].

Discussion

If athletes involve Yogic practices in their life, then they can give their performance with highest peak level. Yoga is an integral way of living with least requisites. Xu *et al.* 2022 ^[33] recommended in their study that involvement of yogic intervention can improve the functional movements and mindfulness level in collegiate athletes and more study is needed to explore the impact of yoga on athlete's different level. According to Ekelund *et al.* 2022 ^[10] mental health problem are increasing day by day in athletes and they need to be interventional treatment to overcome their problems. Another study by Tiwari & Cherian 2022 ^[30] says that combination of asanas and pranayama interventions can greatly enhance the fitness of athletes. Involvement of yogic aspects in the field of sports can greatly improve the overall fitness criteria of each athlete and also enhance their way of living, personality and make them humble and happy. Devi & Malik 2023 ^[9] states in their study that yoga supports mental stability of athletes and plays a necessary role in athlete's life.

Conclusion

Yoga is a harmony between mind, body and soul. Practice of yoga makes a person fit and enrich with stable mind set. Sports and yoga both are opposite from each other. In Sports over practice of exercises makes a person extrovert and aggressive whereas yogic practices make a person introvert and calm. Involvement of yoga in the field of sports make athletes more fit and stable. Yoga improves overall all fitness components of athletes while they are physical fitness components or psychological components. Yoga improves the focus and concentration which is the mandatory in sports to do their best performance. Yogic practices based on stretching, deep breathing and relaxation techniques which enhance overall performance of athletes and makes a healthy and happy environment for them.

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