

REVIEW ARTICLE

Narrative review on the importance of yoga in physical education and sports

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Abstract

One of India's spiritual systems, yoga, emphasizes the value of working with the human body to develop good thoughts and behaviours. Additionally, yoga assists in balancing our physical and mental conditions. However, lack of understanding about the impact of yoga in sports seems to have led to a decline in yoga practise specifically among sportsmen and sportswomen. Thus, this narrative review is designed for sportsmen and sportswomen, physical education students, teachers, yoga students, health professionals, and those who are inclined to study yoga. This review identifies a leaner relationship between the systems of yoga and sports, and provides information on the value of yoga in physical education and sports. All the data in this article were collected using search terms including "yoga", "physical education", "asana" and "sports". Various beneficial yoga factors influence sport performance, and these important factors are outlined with appropriate evidence. All the findings included in this review paper highlight the importance of yoga in physical education and sports, and warrant the need of special awareness of the system of yoga in health, physical and sports education.

Keywords: *Yoga, Asana, Physical education, Sports, Athletic Injuries*

Introduction

In the modern push-button age, the involvement of physical activity becomes less to execute the daily routine work which leads to less physical fitness and various diseases. This necessitates the human being to perform exercise daily to avoid health-related problems. Exercise is the easiest and the best system to maintain good health (Chatterjee & Mondal, 2014). All parts of the body will grow and become healthy if it is utilised sparingly and gets exercise. Growth will be slowed, it becomes more susceptible to illness, and it ages more quickly if it is neglected and kept idle.

Physical education aims to improve human performance and enhances human development through the medium of physical activities. The goals of physical education include the development of motor skills, maintaining overall fitness, advancing knowledge, and the encouragement of a good attitude towards physical activity. Thus, physical education is an integral part of a healthy life (Bailey, 2006).

A person whose participation is motivated by a combination of intrinsic and extrinsic factors defines sports as a formalised

competitive activity that involves vigorous physical effort or the use of relatively complex skills. Sports are becoming increasingly popular, and this trend is likely to continue in the future. Physical and sports disciplines are now considered international disciplines because they foster international understanding and universal brotherhood. As a result, each nation's moral and social responsibility is to promote physical education and sports (Mosler et al., 2022).

Yoga is an extraordinary and unique Indian technique for developing inner awareness. By vibration and pulsation with the body, mind, and intellect levels, one can master the external and internal forces. Yoga is a discipline, which provides perfection, purity, and life's fulfilment. Womb to the tomb, man is basically in search of happiness and there are numerous yoga methods available to meet the needs of various people in society. Holistic living entails practising yoga consciously to reap its full benefits (Hayes & Timalisina, 2017).

While most of the studies provide important insights into the nature of yoga and their common benefits, there is a paucity of

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special details on the importance of yoga in physical education and sports. This is primarily the case since the majority of studies do not discuss the application of yoga as a means of mitigating the side effects and adverse effects of sports. Thus this study was aimed to compile the literature related to yoga and sports. The main objective of this study was to provide detailed information on yoga, its benefits in general and specific importance in mitigating/preventing side effects arising from the sports.

Systems of yoga and its importance

Yoga is divided into several systems in the scriptures, such as Karma yoga, Bhakthi yoga, Janana yoga, Hatha yoga, Mantra yoga, Yantra yoga, Laya and Kundalini yoga, Tantra yoga, and Raja yoga (Hayes & Timalisina, 2017). Following Karma yoga entails doing your duty without regard for yourself. Karma yoga's main goal is to control and eventually let go of your ego (Pallathadka et al., 2022). Bhakti yoga is also known as the path of devotion or the yoga of love. The goal of Bhakti yoga practice is to achieve the impression of Rasa (essence), a state of pure bliss attained through devotional surrender to the divine. Janana yoga is the way of accomplishing knowledge of the true nature of reality through the way of meditation, self-inquiry, and contemplation (Hayes & Timalisina, 2017). Hatha yoga is a type of yoga that uses physical techniques to try protecting and channel the vital force or energy (Petrič et al., 2014). Mantra yoga is a meditation practice that fo-

cuses on chanting sacred syllables while also practicing conscious breathing and meditative focus to quiet the mind, cultivate spiritual energy, and achieve states of enlightenment (Vaidik et al., 2020). Yantra yoga employs a seven-phase movement sequence that is linked to seven-phase breathing. The position in the central phase of each movement, in particular aids in the creation of specific breath retentions that work on a deep, subtle level (Rathore et al., 2017). Laya and Kundalini yoga focus on highly influential achievements or experiences of dharma or the life purpose of liberating oneself from the Karma, the bondage of life. Raja yoga is the type of yoga that controls mind and body, with an emphasis on meditation and energetics (KR, 2019; Hayes & Timalisina, 2017). All yoga systems are beneficial for yoga practitioners and they have different benefits (Roland et al., 2011).

Raja Yoga or Astanga Yoga

Out of the above types of yoga, Raja yoga is the most powerful tool to tune the body. Raja yoga is also called Astanga yoga. The Sanskrit term “Ashtanga” emphasises the eight stages of Raja yoga (Figure 01): Yama, Niyama, Asana, Pranayama, Pratyahara, Samadhi, Dharana, and Dhyana (KR, 2019). These limbs are given in ascending hierarchical order, and each limb leads to the next. Each limb must be mastered before practising the next limb. The utility of each stage differs for specific benefits for players (Y. Sharma et al., 2018).

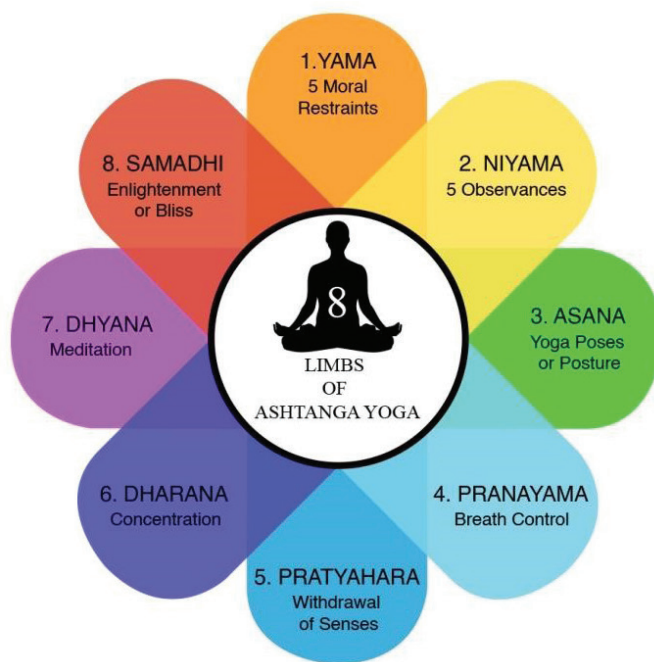


FIGURE 1. Eight Limbs of Ashtanga Yoga

Yama

Yama is a universal moral commandment. It is the general discipline (social attitude), and it is the control of the body, mind, and speech. There are five Yama that a player should understand to have the best sportsmanship qualities (Ross & Thomas, 2010).

Yama:

- Ahimsa - Non- violence
- Satya - Truthfulness
- Asetya - Non- stealing
- Brahmcharya - Faithfulness
- Aparigraha - Non-greed

Niyama

Niyama is self-purification by discipline or obedience to prop-

er conduct (personal discipline). Niyama is devotion, surrender to a higher infinite power and the rule for living. It emphasises remembering God and surrendering everything to him. Niyama is five in number and players should follow the principles of Niyama to maintain discipline with opponents, teammates, physical education teachers, coaches, officials, family members, and society members (Y. Sharma et al., 2018). These Yamas and Niyamas prepare the individual mentally and physically for the asana postures.

Niyamas:

- Saucha - Cleanliness
- Santosha - Contentment
- Tapas - Self-discipline
- Svadyaya - Self-study
- Ishvara pranidhana - Surrendering to the divine and high power

Asana

Among the eight limbs of yoga, the third limb is Asana. It is closely associated with physical education and sports (Ross & Thomas, 2010). It is the oldest science of self-development for physical, mental, and spiritual control. People of both sex and all age groups, irrespective of profession, can practise asana (Jose & Shailesh, 2021). Asana can be applied in physical education and sports for enormous purposes depending upon the creativity of physical education experts, coaches, and players (Cowen & Adams, 2005).

The primary purpose of applying asana in the field of physical education and sports are two folds namely: a) to develop a healthy body b) to gain self-control and better psychological stability (Ross & Thomas, 2010). A human being is a psychosomatic organism and a sound body with a sound mind is essential for players to achieve the goal. Asana coordinates the actions of the body and mind of players (Bal & Kaur, 2009; Chatterjee & Mondal, 2014). Different yoga asanas are illustrated in Figure 02.



FIGURE 2. Yoga Asanas

Pranayama

Pranayama means control of breath and it involves three main phases: Puraka (inhalation), Kumbhaka (retention), and Recha-ka (exhalation). These are best practiced in the early hours of the morning or after sunset. Pranayama practise made use of the diaphragm fully by drawing the air into the lowest and largest part of the lungs (Sengupta, 2012). Due to the regular practice of Pranayama, (a) respiratory efficiency is improved (b) The vital capacity of the lungs is increased (c) during Kumbhaka, there is a slowing down of heart rate (V. Sharma et al., 2013), (d) the training to tolerate mild hypoxia, e.g., during Kumbhaka can stimulate the myocardium to increase its vascularisation as recorded at higher altitudes, and (e) synchronisation of different activities of the organism with respiration is increasing. Hence, the systematic practise of Pranayama is useful for athletes in different sports and disciplines (Telles & Naveen, 2008). It is more useful for athletes who compete in aerobic activities.

Pratyahara

Pratyahara is the introversion of various sense organs by restraining them from worldly objects (Ross & Thomas, 2010). It requires compelling determination and repression of the senses. The word "Pratyahara" derived from a Sanskrit word. There are two Sanskrit words included here: word "Prati", which means "to withdraw", and other root word is "Ahara", which means "Food". Here "Food" refers to anything external stimuli that peoples consume with their mind (Himashree et al., 2016). To explain further, "Ahara" can refer to anything people put into their bodies and mind physically and mentally. This phenomenon helps the athletes to control their senses and thereby improving fitness, health

and ultimately enhance their performance (Taneja, 2014).

Dharana

Dharana is the concentration of an object. It is the beginning of the last stage of meditation of Samadhi. The aim of Dharana is to bind a person's consciousness to one particular object, idea or place (KR, 2019). The diversion of attention during training and especially in competition leads to failure in sports. Events such as archery, shooting, chess, etc. require more concentration. Further, goalkeepers of football, hockey, handball, etc. require maximum concentration than field players (Y. Sharma et al., 2018).

Dhyana

Dhyana is the stage of meditation and requires complete meditation on the object of concentration. Meditation is the most effective mental and physical tonic. It opens the door to intuitive knowledge, realms of external bliss and results in a calm and steady mind. Regular meditation practices assist the players in relaxing the mind and body which supports in the development of better psychological stability (Mastun et al., 2020; L. Sharma, 2015).

Samadhi

Samadhi is the pinnacle of yogic attainment. It is a true sense of communication and peace. Samadhi simply refers to the complete stillness of the mind that allows the individual to merge with the universe (KR, 2019). This settling of mind is the heart of yoga, where the senses have been transcended by complete refinement of the body and mind. This is the last and most important stage of yoga and it is not widely applicable for athletes.

General importance of yoga

The benefits of yoga can be classified as physical, physiological, biochemical, and psychological benefits (Büssing et al., 2012). Various physical benefits of yoga can be achieved, especially by following yoga asana training and maintaining correct posture (Petrić et al., 2014; Y. Sharma et al., 2018). One can achieve physical fitness while improving strength and variety of flexibility namely, lower back flexibility, hamstring flexibility, and shoulder flexibility (Tracy & Hart, 2013). Thus improves overall general health while strengthening the weak part of the body (Ross & Thomas, 2010; L. Sharma, 2015).

Pranayama mainly contributes to the physiological benefits of yoga. During the slow deep breathing, it stretches the lung tissues by the action of slowly adapting receptors (Zaccaro et al., 2018). This increases the respiratory and cardiovascular efficiency while increasing the volume of the lungs and intake of oxygen (Cooper, 2003). Thus, the blood pressure and pulse rate were automatically regularized. Also, this improves the vital capacity. Pranayama also effects to enhance Neuro- muscular coordination and immunity power (V. Sharma et al., 2013; Telles & Naveen, 2008).

Several biochemical benefits of yoga (significant drop in the values for total cholesterol, low-density lipoprotein, triglycerides, and blood urea) have been reported (Himashree et al., 2016). Yoga practices also alter the breathing capacity which increases the VO₂ max. (the amount of oxygen that the body intakes), and thus the haemoglobin count in the blood increases. Yoga has also been indicated to lower the stress hormones in the body while increasing beneficial brain chemicals such as gamma aminobutyric acids and endorphins. These chemicals also help in improving the mood and reduce the anxiety level (Y. Sharma et al., 2018).

Psychological benefits of yoga achieved by improving mental concentration, attention, self-control, self-acculturation psychological stability, social skills including relationships with parents and peers and decreasing some psychological issues namely anxiety, aggression, depression, inattention and social stress through the yoga practices (Khalsa et al., 2012; Mehta & Sharma, 2010).

Importance of yoga for sports and innate side effects of sports

Sports give the whole world a chance to mingle together, exchange values, and improve relationships. Sporting events provide an ideal setting for human-to-human exchange. Generally, most people participate in a sporting event for the enjoyment of it as well as to achieve fitness and tone up their bodies (Chen & Sun, 2017). However, games have also become a procession. Competitive sports are fundamentally different from recreational sports activities. Competitive sports necessitate long periods of strenuous training. Furthermore, athletes have a keen interest in succeeding in the competition. Injury is quite common in competitive sports (Finch & Staines, 2017). One main consideration is that most sporting activities rely on the usage of one part of the body, and this creates asymmetry and overuse of limbs which leads to high levels of physical and mental stress for the athletes (Bailey, 2006). Further, as sports are becoming more and more professional, athletes suffer from stress. Yoga is an excellent method for protecting an athlete's mind and body (Ross & Thomas, 2010). Professional athletes should understand that yoga is an invaluable tool for achieving and maintaining peak physical and mental strength (Banerjee et al., 2007; Sahu & Yadav, 2020).

Importance of Yoga for Athletes – Running

There is a tendency for a long-distance runner to push the body to a high level of training without recognising the danger signals. The assistance of running is at the cost of the internal

organs; the lungs and heart are irritated and the constant movement disturbs the abdominal organs and causes cramping of the circulatory flow (Bramble & Lieberman, 2004). Further, athletes' endurance capacity cannot be maintained for long periods due to ageing. Yoga stretches to soften the hamstring muscles, which are tough and hard from hours of running (Cowen & Adams, 2005). Sitali Pranayama removes excess heat in the body, which is good for marathon runners (Telles et al., 2020). Furthermore, back, and forward bends and twisting in asanas such as Supta Virasana and Urvottanasana, protect the heart, lungs, and the abdominal organs. Also, these asanas help strengthen the core muscles around the reproductive organs (Cowen & Adams, 2005). Bridge poses, shoulder stands, and restorative poses also help stimulate the glands that help produce hormones and increase hormone production by stimulating the major reproductive glands (Chatterjee & Mondal, 2014).

Importance of Yoga for Athletes in disciplines that include jumping

The movements in the different jumps involve only one leg. The repeated use of the same side of the body results in asymmetry. The groin muscles are opened only on one side, and the hip joints are also strained on one side (McClanahan, 2002). Thus, for a jumper, asana that opens the groin (Upavishta Konasana, Samakonasana, Buddha Konasana, and Supta Padangusthasana) are very beneficial in preventing imbalances (Solakoğlu et al., 2021). Hanumanasana optimises muscle usage in triple and long jumpers. Balancing asana helps pole vaulters train both sides of their bodies for load bearing (Jose & Shailesh, 2021). One-sided balances such as Kasyapasana and Vasisthasana train the sides of the body and the latissimus dorsi muscles (Rathore et al., 2017).

Importance of Yoga for Athletes in disciplines that include throwing

Most throwing events use only a single arm. The imbalance between the overused and underused muscles causes problems eventually (McCLANAHAN, 2002). For example, when throwing the discus, the palm of one hand is constantly folded, while the other is not utilized. In shot-put throw, the one-sided effect can last for years after the sport has ended. The common problem is that of the spine being rotated always to the right (except the lefthander). Unnecessary strain on the facet joints causes uneven and premature wear and tear, as well as a scholastic deformity (Russell et al., 2012). Twisting and Lateral bends asana are beneficial for preventing spinal strain and maintaining healthy evenness of usage (Holtzman & Beggs, 2013).

Importance of Yoga for Archery

In archery, one eye and one shoulder are overly strained, and one side of the brain is used more than the other side (Sahu & Yadav, 2020). Over the years, the archer develops a nodule in the trapezius. In standing poses, use the eyes symmetrically and assist the archer in training both sides of the orbital muscles and eye focusing (Jose & Shailesh, 2021). Handstand, elbow stand, balance poses, and unilateral balancing poses like Vasisthasana, as well as dog poses done both ways with fingers on the wall and in the opposite direction, are useful for achieving a balance of both sides of the body, including the hands and overcome the visual discomfort (Telles et al., 2006). The contemplative type of Pranayama, and Nadi suddhi is highly useful for the archer who is incapable to concentrate (Sahu & Yadav, 2020).

Importance of Yoga for Shooting

The eyes are strained to the limit in both archery and shooting. Forward bends with the bandage on the eyes and Shanmukhi mudra and asanas are beneficial for relieving eye strain (Telles et al., 2006). When considering the shooting game, balance and

flexibility also require holding their gun for a long period without bouncing it. Yoga practices also help enhance flexibility and balance (Cowen & Adams, 2005). Further, it also strengthens and refine connective tissues (Iftekher et al., 2017; Bühlmayer et al., 2017).

Importance of Yoga for Boxing

It is irrational to allow two humans to participate in a sport that entails hitting each other with a substantial chance of injury. The method of crowding the hands close to the body prevents the hand and torso muscles from stretching and healthy breathing is hindered. For the spine, back bends take preference over forward bends. Asana that provides a proper extension of the arms, such as handstand, Urdhva dhanurasana, elbow balance, and dog pose and working with the wall ropes to safeguard the extension of the spine is very effective to expanding the frontal torso (Telles et al., 2006). Uttanasana, seated forward bends, dog pose, and headstand, and shoulder stand along with Viparita and asanas are extremely beneficial for calming the mind, brain and senses agitated by the constant pounding (Banerjee et al., 2007).

Importance of Yoga for Wrestling

Wrestling is an ancient sport, which is relatively not so fierce for the body and mind. There are many styles that wrestlers maintain, but one thing they all have in common is that the body must be fattened and kept heavy (Yamauchi et al., 2004). Sumo wrestling is the mildest variation, to push the opponent out of the ring. Sumo wrestlers, who are grossly overweight, have hypertension, diabetes (Mouzan et al., 2010), and premature degenerative disorders of the spine, hip, ankle, and knee joints. Once the wrestler retires, the inactivity joint with the overweight destroys the body easily. Wrestlers often change their diet for weight loss to qualify for a particular category and this is damaging to the body's metabolism. Standing asana protects the hip and knees joints. Asana, which opens the groin, ensures proper alignment and a proper blood supply (Shaw & Kaytaz, 2021; Lehecka et al., 2021).

Importance of Yoga for Weightlifting

Weightlifting exposes the entire body to powerful forces. The extra weight placed on the body puts a constant strain on the lungs, heart, and abdominal organs. The cervical spine is strained due to excessive loading, and chronic low back pain is usual (Alabbad & Muaidi, 2016). Twisting poses are extremely beneficial for softening the weightlifter's hardened muscles (Cowen & Adams, 2005). Passive backbends relieve back strain by resting the posterior muscles of the spine (Keogh & Winwood, 2016). Forward bends increase blood flow to the posterior spinal muscles, which are always constrained when weightlifting (Ernst, 2016). The pelvic organs, which are pressurised in the squat position, get relief from Upavishta and Baddha konasana (Hemmerich et al., 2019). Ujjayi pranayama assists to release tension in the senses, mind, heart, and lungs (Sahu & Yadav, 2020). The weightlifter is forced to perform Kumbhaka as the elevator is done. This constricts the diaphragm and slows the unrestricted circulation. This strain is relieved by Pranayama with a long exhalation (Holtzman & Beggs, 2013; Lynn & Basso, 2023).

Importance of Yoga for Gymnastics

Gymnastics is one of the most graceful and stylish sports that many people enjoy. The Gymnastic performance is frequently interrupted by extension movements. This causes ligaments and muscles to be looser than usual (Kerr et al., 2015). Lower lumbar muscle sprains and spine injuries are common (Kruse & Lemmen, 2009). As gymnastics is highly sophisticated, long hours of prac-

tice are needed. In yoga, every cell is kept in alignment and then balanced (Jose & Shailesh, 2021). Backbends provide endurance for both the body and the mind during times of emotional depression (Bal & Kaur, 2009). Yoga shows the correct geometry of poses to prevent injuries (V. Sharma et al., 2013). Pranayama is supported to relieve stress on the mind and senses.

Importance of Yoga for Swimming

In swimming, both the upper and lower extremities are used symmetrically. This precludes the harmful impact of field sports. A person with lower back pain can swim easily, as the buoyancy prevents the load on the back (Smith et al., 2006). Body weight maintenance leads to nutritional deficits (Hooogenboom et al., 2009). As the swimmer moves from land to water, the glandular system may experience temperature fluctuations. Because swimmers spend more time in water, the muscles become accustomed to various types of stimulus in terms of G force, and the body's capacity to withstand physiological stress and strain on land may change (Kline et al., 2007). To prevent this, it is important to practise some types of exercise on land every day. This exercise should be a non-stressful exercise to support with recuperation. Asana likes handstands, dog pose, back bends, elbow balance and teaching the proper arms stretch nullifying strain (Jose & Shailesh, 2021). Inversions relieve weariness in the eyes, sinuses, ears, and legs. Backbends assist the body sweat to dissipate internal heat (Keogh & Winwood, 2016). The groins, which are repetitively constricted, are promoted by Upavishta and Baddha konasana (Bal & Kaur, 2009). Pranayama assists in maintaining well coordination between inhalation and exhalation, which is very necessary as the upper respiratory organs dip in and out of water (Chatterjee & Mondal, 2014). It also aids in the efficient evacuation of nasal secretions, and lower and upper respiratory tracts. Kumbhaka improves fit endurance for water sports (Ross & Thomas, 2010; Telles & Naveen, 2008).

Importance of Yoga for Rowing

The rower is constantly bent forward. The spine, groin, and hands are among the body parts that suffer. Because of repeated flexion stresses, the spine can degenerate prematurely over time and dorsal spine is excessively bowed (Thornton et al., 2016). Because of constant pressure, the points of the buttock bones become sensitive to discomfort. The muscles of the spine can suffer premature degeneration and the arms face the stress of asymmetrical usage (Hosea & Hannafin, 2012). The knees need to be stretched out. The posture puts strain on the circulatory and respiratory systems (Kohli et al., 2019). Use of elbow balance, handstand, and backbends teach better arms extension and maintain blood flow and suppleness (Tran et al., 2001). Standing poses provide relief to the oarsman's spinal muscles and lower limbs (Jose & Shailesh, 2021). Baddha and Upavishta konasana initiate the constricted groin area and enhance blood circulation, and inversions cool the brain, which is constantly in the flexed position (Bhavanani, 2013). Pranayama increases endurance while decreasing strain on the sense organs. Rowers should not overlook the advantages of yoga (Das & Yoga, 2022).

Importance of Yoga for Football

Tears in the semi-lunar cartilage are more common in this game than in any other. With the added strain of weight bearing, the knee rotates outward yogic exercises are ideally suited. All standing poses of yoga are important, and it strengthens and massages the cartilages and improves weight bearing (Liu et al., 2021). The player will benefit if Padmasana and Virasana, which massage the joints, are trained daily before and after the game (Acharya et al., 2010; Raub, 2002).

Importance of Yoga for Hockey

In hockey, the knees, shoulders, and spine are the most strained. During tackling, a hockey player must always bend to one side. The spine is usually bent to one side, with one arm extended and contracted with the other arm. The dominant shoulder was strained (Barboza et al., 2018). The forearm muscle and inner biceps are taxed. Asymmetry is also used with the legs and with greater emphasis on the back knee (Cowen & Adams, 2005). Long-term issues include low back pain, knee wear and tear, and cervical muscle strain (Barboza et al., 2018). The mind and senses are required to follow the ball and become exhausted. Dog pose is best to correct the imbalance in the spinal muscles (Govindaraj et al., 2016). Virasana and Padmasana are good for resting overworked knees (Kohli et al., 2019). Backbends like Viparita dandasana and Urdhva dhanurasana are supported by providing symmetry in the posture and mobility of the hands and shoulders (Tran et al., 2001). Supine pranayama and forward bends with the band will relax the mind and eyes (Bühlmayer et al., 2017).

Importance of Yoga for Cricket

Cricket is one of the world's most popular games and it is becoming very rough today. Players must use headgear and other protective equipment to shield themselves to avoid injury. In the major game, the problems and requirements of yoga differ depending upon the playing position (Gamage et al., 2017).

The Batsman

The right-handed batters must constantly incline and bend forward the spine and eyes to the left. The left hip and shoulder always project in the same direction. The right shoulder is always lower than the left, and the clavicle area is hollowed out on the left. The inner knee, like the inner ankle, is more prone to weight bearing. Forward bends keep the body cool after being exposed to the sun for long periods (De Zavala et al., 2017). Backbends provide the batsman with the energy he must play for several hours without tiring (Mohanty et al., 2019).

The Bowler

Forward bends help to keep the body cool after long periods of sun exposure (De Zavala et al., 2017). Also, Backbends give the bowler with the energy, player should play for several hours without getting tired. The trapezius muscle of the non-dominant shoulder is always contracted, resulting in the formation of a nodule eventually. Standing Marichyasana and Bharadwaj asana are rotational movements that provide neck relief (Li et al., 2019). Neck and shoulder relief can be obtained by extending the neck on the rope, holding the bar behind the back, and performing back bends with the rope. Backbends provide the necessary endurance to the pace bowler (Cowen & Adams, 2005). Ardha halasana is important for recuperation at the end of the day (Fishman, 2021).

The Wicket Keeper

Every day, the wicketkeeper must squat and rise several times. Overuse of the neck causes continual flexion and extension, this can cause tiredness of the spinal muscles and groin muscles, as well as low back and cervical aches (Mount et al., 2014). The organs of perception are also overused, as the keeper must study the movement of the ball and remain vigilant. Rotations and lateral standing poses release the strain on the back (Solakoğlu et al., 2021). Baddha and Upavishta konasana assuage the strain on the groin along with Supta Baddha konasana. Ardha halasana and Forward bends soothe the senses. The training of Shanmukhi mudra is assisted to lighten the strain on the eyes and mind (Holtzman & Beggs, 2013).

The Fielder

Fielders are less prone to postural issues. Sun exposure and salt and fluid loss deplete energy. Supta virasana and Passive inversions are excellent for relieving fatigue (Muñoz-Vergara et al., 2022).

Importance of Yoga for Tennis

Tennis players use the serving arm excessively. The dominant hand's forearm is thicker, and the other arm is grossly under used. If the players have a practise of top spinning the ball, the wrist and medial elbow are overused (Marcora, 2009). The other upper arm and forearm muscles are preferred if the backhanded stroke is single-handed. Furthermore, normally tennis elbow, shoulder and knee pain are usually caused by tennis (Pluim et al., 2006). Asana-like handstands, dog pose, including the upward dog, and balancing poses help for relieving shoulder and elbow pain (Evans, 2013). Vitrita karani followed by Sputa virasana is useful to give the whole neuro-endocrine system that should rest and recover (Govindaraj et al., 2016). The achilles tendon and hamstrings are kept elastic by asana like Supta and Hasta padangusthasana (Luo & Xu, 2023). Virasana and Padmasana protect the knees (Kohli et al., 2019). Pranayama increases endurance while playing sports (Mohanty et al., 2019).

Importance for netball

Netball requires strong leg muscles because it is essential to move quickly. Also, strength and flexibility components are essential for players. Passing and shooting skills require proper upper body strength, good balance, and coordination required when defending another player (Cowen & Adams, 2005). Netball is a non-contact game that involves some bumping and jostling. Players follow risk-stepping, shifting, and quick turning in the game. Therefore, the chances of injuries are high. Such injuries that affect netball playing include ankle sprains, muscle strains, finger sprains, and knee sprains (Joseph et al., 2019). Tree pose is such a balancing act that helps get ankle strength and balance (Solakoğlu et al., 2021). Uktasana also supports preventing knee sprains. It's that support to strengthen the knee joint, hamstring muscle, quadriceps muscle, abdominal and lower body region (Zhu et al., 2021). Ekapadasana pose can enhance balance and coordination and Pranayama provides endurance and it assists to play matches for a long duration (Tekur et al., 2012).

Conclusion

Main findings of the present study indicate that yoga may improve a range of health-related outcome indicators, including physical, physiological, biochemical, and psychological benefits. This review reinforces the idea that yoga has a significant impact on various sports performances, its side effects and any person in general. Further, yoga can play a huge role in developing the mind regulation, physical conditioning and focus that benefits sports performance. Yoga practices are beneficial for keeping healthy in all sports and in general life.

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