Chapter 1

INTRODUCTION

1.1.1 Background of the Problem

Volleyball is a game played all over the world. It is one of the most popular games. Since it is a well known game, it demands one to be physically and mentally fit in order to perform well in the game. A lot of varied skills are involved in the game of volleyball like the serve, passing, blocking etc. and to perform all these skills, physical and mental fitness is vital. Skills like the serve and under hand passing are important skills that help in winning the game.

The serve plays an important role in the game. Every point in the game needs to be started with a serve and the team that wins a point gets the added advantage to serve continuously. This is the reason having a powerful serve is a great advantage on the court. Players not having much flexibility of the back are unable to serve as well as ones with flexible backs. Yoga is very beneficial in developing the flexibility and concentration of players and therefore, it can be a boost in enhancing every individual’s game. By performing selected Asanas like the chakrasana, an individual may benefit in performing the volleyball service in a much better way as it helps in development of flexibility of the upper body. Yoga not only improves the range of motion of the body but also the muscle strength.

Yoga is not a religion. It is rather a healthy way of living. It has a focus on both mental and physical fitness. In highly tense situations it is difficult for the mind to focus and in such a case, proper breathing that helps the player to stay focused is essential. In order to be physically efficient in all activities, the balance of strength and flexibility is a prerequisite. If one is training regularly in physical fitness, a group of
muscles are excessively used and exercised and as such, multiple aches and pains are caused in the body and these all aches can be neutralised with the help of yoga.

Volleyball requires proper coordination of the upper body and the lower body and this can be acquired only when the player has a good core. Yogic practices help maintain proper shape and tone of the core muscles. Very often, volleyball players suffer from back injuries as they have weak core muscles.

Regular yogic exercises are also useful in getting proper sleep. This helps the player get proper rest which is essential in order to revitalise to play again. Yoga also activates the parasympathetic nervous system, thereby promoting coordination. During the game yoga helps control the stress and anxiety level of players.

A good pass helps in winning a point for the team. So, passing is a very crucial skill. Volleyball is a team game; hence supplying the ball to the team mate is crucial and helps in getting a point. A player needs to have good concentration, excellent leg strength and agility in order to master the skill of passing and Yoga would be helpful in developing such skills and factors regarding physical fitness. A lot of players are unable to pass the ball skilfully as they are not physically fit to perform the skill. This has an adverse effect on the outcome of the game. The Tadasana, Bhujangasana etc. are asanas which help in strengthening of muscles and help in making a player more agile.

Meditation and Pranayama are two important aspects of Yoga and these are helpful in improving the concentration in every individual. In volleyball, having good reflexes is essential as it helps to return the ball. One needs to be able to concentrate on the ball which makes it much easier to return.
Taking into consideration the effects of yoga on the various physical fitness factors a study can be done to see the effect of the different Yoga Asanas on the selected volleyball skills and selected physical fitness factors.

1.2 Justification on selecting Yogic exercises effects on selected Physical fitness factors and Volleyball skills

Yoga is about body movements, but it has a focus on breathing and meditation much more than that. Yoga plays a vital role in improving the flexibility and strength of the muscles involved in the game of volleyball. A player has to be adequately flexible and possess toned muscles that in turn would better the performance on the court. An increase in the range of movement naturally boosts the speed of the player. Strength and speed are together responsible for power. This power can be used while serving in the match if there is strength and speed.

When flexibility is good, chances of injury are fairly reduced. A more limber body has lesser chances of muscle pull or inflammation of the tendon. Dexterity is a quality which helps enhance productivity on the court. For example, if a volleyball player practices the Suryanamaskar, it helps the player in serving in the match. A good service requires a healthy arc which helps to gain more speed and follow through while serving. Practicing the Suryanamaskar enables the arc of the upper body to naturally increase the flexibility. Meditation is important in improving concentration, which is useful to volleyball players as it helps in being more alert and agile while playing on the court.

Yoga helps overcome muscle imbalances and problems related to asymmetry. One side of the body is more dominant than the other in certain sports which causes muscle imbalances and asymmetry problems. This is also the case among volleyball players as most use one side of the body.
Certain yogic postures are isometric in nature. This helps in strengthening the muscles. Breathing is an important part of yoga which enables proper supply of oxygen to all parts of the body. This is crucial in reducing lactic acid formation.

Taking into account all the benefits of yoga, it is evident that Yoga can play an important role in taking volleyball to another level. Seeing all these benefits a study can be done to see the effects of yoga on the selected volleyball skills and physical fitness factors of volleyball players.

16 to 18 years age group boys were selected as they have gained understanding of the game to a certain extent, technically and skilfully. The physical and mental development has also taken place adequately that would be helpful for the study.

Why Yoga?

A common man accepts any system if it can prove itself useful in his day-to-day aspects of life. In the past, we have seen society accept and adopt science as an integral part of its structure. Technology has helped humankind in solving the problem of providing for the basic necessities of life. It also offers a more comfortable and convenient life to an individual. Over the years, we have seen society become more acceptable of Yoga. Why? ‘Yoga’ is a conscious process which offers man the ability to solve the menacing problems of unhappiness, restlessness, emotional upset, and hyper-activity. It also helps to evoke the hidden potentialities of man in a very scientific and systematic manner and enables man to become a fuller individual. Yoga has a focus on all the faculties of man – physical, mental, intellectual and emotional – and it helps develop all these faculties in a harmonious and integrated fashion which helps overcome the all-round challenges of the modern technological era with its hectic speed.
Yogic processes specialize getting the faculties sharpened in tune with the spiritual progress of man. We will now try to understand what we mean by an integrated personality development combined with spiritual growth.

1.3 Concept of Physical Fitness

Physical fitness can be defined by splitting it into two different types of fitness: the first is health related while the other is skill related. Both these types require regular exercise and proper nutrition combined with rest. However, health related physical fitness comprises of cardio respiratory fitness, muscular strength, muscular endurance, flexibility and body composition. It refers to the organic systems of the body which are healthy and function efficiently. Such fitness allows you to engage in vigorous tasks and leisure activities. There are many concepts and the following are some of them.

FITT= Frequency, Intensity, Time and Type

Frequency- how often you do physical activity.
Intensity- how hard you perform physical activity.
Time –how long do you do physical activity.
What type of physical activity you are involved in.

Physical fitness basically consists of five components: body composition, flexibility, cardiovascular fitness, muscular strength and muscular endurance.

There are two types of fitness: skill related physical fitness and sport related fitness. Skill related physical fitness requires the following components: agility, balance, coordination, power, reaction time and speed. In order to perform well, it’s very important to have a good command over all of these components.

Physical fitness refers to the body’s ability to function efficiently and effectively. Physical fitness is a state of being which consists of at
least five health related and six skills related components. Each of these contributes to the total quality of life. It also determines a person’s ability to work efficiently, take pleasure in leisure time, be healthy, resist any kind of hypo kinetic diseases, and meet emergency situations. Physical fitness is closely related to, but still different from, health and wellness. Development of physical fitness is the result of many things. However, optimal physical fitness is not possible with regular physical activity.

The five components of health related physical fitness are body composition, cardiovascular fitness, flexibility, muscular endurance and strength. Health related fitness characteristic has a direct relationship to good health and it also ensures a reduction in risk of hypo kinetic diseases.

**Body Composition:** It refers to the relative percentage of muscle, fat, bone, and other tissues present in the body. A fit person has are relatively low, although not too low, percentage of body fat.

**Cardiovascular Fitness:** It refers to the ability of the blood, heart, blood vessels and respiratory system to supply adequate amounts of fuel and oxygen to the muscles which in turn utilise this fuel to allow sustainable exercise. A person with cardiovascular fitness can persist long time periods engaged in physical activity with undue stress.

**Flexibility:** This term refers to the range of motion which is available in a joint. Muscle length joint structure is one of the primary determinants of flexibility, and there are certain other factors as well. A fit and flexible person can move the body joints through a full range of motion in work and in play.

**Muscular Endurance:**

This refers to the ability of the body muscles to exert themselves repeatedly during work or play. A fit person with good muscular
endurance is able to repeat movements for a long time without undue fatigue.

**Strength:**

This refers to the ability of body muscles to lift a heavy weight by exerting an external force. A fit person with good physical strength can do with ease the work that involves exerting strong external force, such as lifting or controlling one’s own body weight.

**Skill Related Physical Fitness**

The primary components of skill related physical fitness are agility, balance, coordination, power, reaction time and speed. They are called skill related because people who possess them find it easy to achieve high level of performance in motor skills, such as those required in sports and in specific type of jobs. Skill related fitness is sometimes called sports fitness or motor fitness.

**Skill Related Physical Fitness Terms**

**Agility:** This refers to the ability of the body to accurately and rapidly change the direction of movement of the entire body in space. Wrestling and skiing are some important examples of activities which require exceptional agility.

**Balance:** The term refers to the skill of maintaining equilibrium either while stationery or while moving. Water skiing performed on the balance beam or working as a riveter on a high building are activities that require exceptional body balance.

**Coordination:** This is the ability of a being to use the sensory receptions together with the body parts to perform motor tasks smoothly and accurately. Juggling, hitting a golf ball, batting a baseball or kicking a ball are examples of activities requiring good coordination.
**Power:** It refers to the ability to convert energy into force at a fast rate. Putting the short and throwing the discus are a few of the activities that require considerable power.

**Reaction Time:** It refers to the time elapsed between the starts of a certain stimulation and the beginning of reaction to that stimulation. Driving a racing car and starting a sprint race are some activities that require a good reaction time.

**Speed:** It refers to the ability of the body to perform a particular movement in a relatively short period of time. A runner on a track team and a wide receiver on a football team are some examples of sportsmen that need good foot and leg speed.

The present study is also related to skills like agility, flexibility and strength.

**Why Measure Physical Fitness?**

The relationship between good health and cardio respiratory fitness, muscular strength, muscular endurance, flexibility, and body composition has been discussed earlier. All the physical education programmes in schools and other fitness programmes must be aimed at the development of all these components. All physical educators must prepare to measure such components by testing skills, interpret the tests results, and then prescribe the appropriate physical activities for the development of health – related physical fitness. Test results can also be used by the physical educators to teach the players the concepts of fitness, to motivate them for self-improvement especially in areas where they lack adequate fitness, and to help these individuals plan fitness goals.

Though participation in sports is not essential for a healthy lifestyle, several individuals enjoy participating in various sports. It is also true that the enjoyment is usually greater for those individuals that possess skill – related physical fitness. The skills of agility, balance,
coordination, power, reaction time, and speed are important components of sports performance. These motor skills also are related to the performance of many types of occupations and daily activities. Testing for skill-related physical fitness can serve to motivate high-ability individuals to perform at even higher levels. In addition, diagnostic testing will enable the physical educator to prescribe the appropriate activities for individuals who do not possess adequate skill-related fitness.

It seems unfair to use the results of performance in a fitness test for grading purposes. If an individual performs poorly in a fitness test and this results in an unwanted grade, it may so happen that the individual reacts negatively to such results. Therefore, rather than being motivating the individual to move towards an active and healthy lifestyle, such a judgement may cause the individual to become even more inactive.

**Why Sports Skills Should be Measured?**

The most obvious purpose of measurement of sports skills is to determine an individual’s progress or level of achievement in a particular sport. Other important reasons why measurement of sports skills is important are:

**Classification:** Skills tests can be conducted early during the instruction period in a sport to classify all the participants. These early tests help eliminate the need to observe the individuals for many different group meetings before attempting to classify them.

**Diagnosis:** Tests help determine the strengths and weakness of the students and this can aid in the planning of unit objectives. It can also help identify those students who may need special attention in developing skills.

**Motivation:** If and when used appropriately, skills tests help motivate individuals to improve and develop their abilities in a particular sport. It develops within individuals the challenge of competing again one’s own
scores and this challenge is often more motivating than the challenge of competing against other individuals.

**Practice:** In the act of performing the tests, the individuals are actually practicing the skills of the sports which ultimately benefits them.

**Program Accountability:** Tests score along with some additional information can be used to bring to light the objectives and values of physical education to the administration, parents, and public. If such information is not made available to them, very often, physical education is perceived as “play period” and nothing more.

**Why Measure Flexibility?**

Health-related fitness has several aspects and flexibility is an important one. Lack of flexibility can lead to creation of different functional problems or disorders in many individuals. Medical records prove that the most common health complaint in the United States is that of lower back pain. Low back disorders are mainly the result of poor muscle tone and poor flexibility of the lower back, and may also be caused due to inadequate abdominal muscle tone. Also, any individual with a stiff spinal column is at a great disadvantage in performing many physical activities. Such individuals also fail to get full benefit from the shock – absorbing nature of the spinal column when walking, running, or jumping. Lack of flexibility in the back may be the reason among many for bad posture, compression of peripheral nerves, painful menstruation, and other ailments. In addition, short muscles prove to limit work efficiency. Such muscles become sore when they are subjected to physical exertion. If an individual lacks a good range of movement, he or she is more likely to incur torn ligaments and muscles during physical activities.

Individuals with adequate flexibility possess greater ease of movement, and have less stiffness of muscles. With enhancement of their
skill of flexibility, they can further reduce chances of injury during movement. Measurement of flexibility must be included in all physical education and wellness programs. Such tests will help identify individuals with poor flexibility which will help prescribe appropriate exercises and activities for them. Flexibility tests are usually conducted to identify individuals with too little range of joint movement, but sometimes they are also conducted to determine if individuals have too much flexibility in certain joints. Too much range of movement is also harmful and can result in joint instability and can increase the possibility of injury.

Flexibility is usually measured for diagnostic purposes however many physical education teachers consider it acceptable to grade performance based on flexibility. The degree of flexibility which is most desirable for health purposes has not as yet been determined and therefore, the grading of the flexibility seems questionable. If performances are to be graded on the basis of flexibility, then the standards set for gradation should be reasonable, and the students must be informed of the standards at the beginning of the unit.

**Why Measure Agility?**

A very important objective in both the teaching as well as non-teaching environment is development and improvement of agility. It is the task of a physical educator to encourage children, youth, and adults to try and maintain an active lifestyle for themselves. Recreational activities are a source of active lifestyle for some individuals. Recreational activities are often enjoyed better by individuals with good agility as contrasted with those with poor agility. Determining grades based on agility levels of students should not be permissible in the school environment. It is questionable to determine how much improvement in agility can be observed in the amount of time spent on agility instruction in the school environment. But, in the performance of a sport, agility is a
primary factor. Hence, if a performance in a sport is graded, agility is also indirectly graded.

Agility tests are, at times, used to classify students or a particular activity or sports, but only tests that measure the skill within the activity or sport should be used for classification purposes.

Agility tests are best used to diagnostically determine which individuals have less agility. In testing for diagnostic purposes, criterion-referenced measurements are more appropriate than norm–referenced measurement. A score must be predetermined in order to place individuals into acceptable and unacceptable agility groups. Once the scores are in, activities must be designed to improve agility and these should be prescribed to the individuals placed in the unacceptable group. The instructor is in charge of designing appropriate activities for these individuals. Individuals classed in the group of unacceptable agility require strength, speed, coordination, and dynamic balance development exercise; sometimes, even simple agility drills may serve to be equally helpful, but this largely depends on the individual. Once the prescribed activities or drills are successfully completed, the improved agility in the individual can be observed through administration of the same agility test.

Why Measure Muscular Strength, Endurance, and Power?

There are varied reasons for measuring pr testing muscular strength and endurance. Strength is one of the foremost essential components for high level performance in most sports. It is also very essential for good health. Strength of muscles helps protect the joints. It makes the joints less susceptible or vulnerable towards sprains, strains, and other injuries of the kind. Strength is also necessary for good posture. Postural problems such as sagging abdominal muscles, round shoulders, and low back pain can be largely prevented if adequate strength is maintained.
Also, strength enables one to perform regular everyday tasks more efficiently and it allows one to experience more satisfaction from leisure sports participation.

A lot of daily activities of an average individual bring to light the need for muscular endurance. We have all experienced occasions when it was necessary to “keep going,” even though the arms, legs, or entire body felt too tired to do so. Perhaps an individual feels this kind of stress on the arms when carrying groceries from the car to the house. The groceries can be listed with relative ease, but they feel heavier and heavier the farther one carried them. This phenomenon can also occur when a person is pushing a stalled car, carrying a heavy suitcase, or performing any task which involves sustaining muscular contraction. If an individual does not lift and carry heavy loads, it is probable that he or she lifts light loads repeatedly or lifts and moves the body throughout the day. To avoid fatigue at the end of the day, you need muscular endurance. An individual with good muscular endurance often has a good body posture which thereby decreases the chances of experiencing backaches and muscular injury while performing routine tasks.

As has already been mentioned, muscular power is a characteristic trait of a good athlete, but it is rarely necessary to have power when performing daily tasks since it is often not considered to be an essential component of health and physical fitness. As such, muscular power is not usually emphasized in physical education and wellness programs. Occasionally, participants of leisure sports feel that increasing their power will improve their sport performance.

1.4 Brief History of Yoga and Volleyball

1.4.1 History of Yoga

The word “Yoga” has its origin in a Sanskrit word “Yuj” which means to join or to unite. Yoga has a focus on a lot of different postures
or “Asanas” that helps in keeping the body healthy. This is its physical aspect. The technique of Pranayama and meditation help discipline the mind and this is the mental aspect of Yoga.

The aim of yoga is primarily integration of personality in all aspects.

Patanjali defines Yoga as “Cittavrttiniruddha”. “Yoga is the prevention of mental activity’-is one of the most famous Patanjali yoga sutras.

Bhagavadgita defines it as “Samatva”. Astanga Yogavivaranam describes it as “Indriya Samyama”. From some of these definitions quoted we shall find the same basic principles seen from different angles.

“Yogaha karmasu kausalam” - yoga is skill in performing various assigned actions and duties.

**Yoga:** The importance of Yoga for spiritual upliftment has been recognized by all the systems of Indian philosophy. In order to apply the knowledge of Yoga to Physical Education it is important to first clearly understand the concepts of Yoga and Physical Education.

**The concept of Yoga:-**

- The word ‘Yoga’has many connotations. If understood etymologically, it means ‘Integration’.’Samatva’ of the Bhagavad Gita conveys the same meaning.
- Terms like homeostasis, equilibrium, balance, and harmonious development are often used to more or less suggest the same thing.
- To initiate the development of such integration, various techniques are employed.
- All the techniques and practices that come under Yogic literature and which are handed down in different traditions also go under the name of Yoga.
The word “Asana” has been derived from the Sanskrit root which means “to sit”. The derivative meaning can be used to explain the term physically as well as metaphysically. On the physical level, the term denotes posture—a sitting posture or a seat. On the metaphysical level, the term has been interpreted by several texts as “establishment in the original state”.

**Classification of Asanas**

In traditional Astangayoga ‘Asana” is the third step after the first two which are known as, Yama and Niyama. In the initial days, Asanas served only a few specific purposes, but in course of time the number of Asanas increased and today there is a wide variety of Asanas. These Asanas can be grouped in a lot of different ways. Some of the classifications, based on Yogic text may be mentioned below.

1. Based on the body positions.
2. Based on the classification of major deities.
3. Based on left and right.
4. Based on the traditions.
5. Classification according to purpose.

On the basis of available literature we may consider the different periods of history as follow:

1. **Pre-Vedic Period**:

   Certain excavations from the Indus valley prove that yoga was practised in some form during that period. An idol of the Mother Goddess and a figure seated in a Yogic posture suggest the antiquity of Yoga.

2. **Vedic Period**:

   The source of Yoga is most definitely traced in Vedic literature even though different scientists differ in their opinions about the connection of the Indus Valley civilization with the Vedic Civilization. A lot of description of mystic experiences can be found in the Vedas.
Certain concepts are seen in their rudimentary form in the Vedas, and these concepts have developed over the years. However, it is surprising to note that the words yoga and Yogin are not seen used in their technical sense in the Vedas.

3. **Upanisadic Period :-**

   A real basis for the system of Yoga can be found in the Upanisads. Earliest Upanisads like Chandogya and Brhadaranyaka give us the basis of Kriyayoga. But, even in this period, the words yoga and Yogin are not found to be used in their technical sense. In Kathopnisad, the word Yoga has been used in its technical sense. The Svetasvatara is perhaps the most important from a Yogic point of view. Its tradition is seen continued in their Hatha texts.

4. **Epic Period :-**

   The Ramayana and the Mahabharata are two great Indian epics, and they prove to be a rich source of information about a lot of varied Yogic practices of that age. In the age of Ramayana, the system of Yoga seems to have been very popular. The famous Bhagavad Gita is the most important section dealing with Yoga in Mahabharata. It deals with the characteristics of the realised Yogin and the three paths of Yoga, namely, Jnana, Bhakti and Karma.

5. **Sutra Period :-**

   The oldest systematic treatise on Yoga which is available in the modern world is that of Patanjali’s Yoga sutras. These are based on the previous and contemporary traditions of Yoga. It has also exerted a great influence on later thinkers and practitioners of Yoga. Yoga has largely influenced Buddhism and Buddhism has also in turn contributed a great deal to the development of Yoga. The great Buddha himself had practised Yoga under the teachers Arada kalam and Uddaka Ramaputta.
A lot of striking similarities can be noted in the concepts and terms in early Buddhist scriptures and Yoga sutras of Patanjali’s and this has given rise to the problem as to which of the two to prioritize; the Buddhist scriptures or the Patanjali Yoga.

Mahavira, the founder of Jainism was a contemporary of Gautama Buddha. A lot of Jain teachings resemble the teachings of the Bhagavad-Gita. A lot of similarities can be noted in the description of Yamas by Patanjali and the vows followed by the Jains. Patanjali might have borrowed the vows from Jainism including the term Mahavrata.

The Yoga sutras of Patanjali have been commented upon by several commentators. These commentaries also reflect on the development of different Yogic concepts and techniques of that period. The first commentary on Yoga sutras is known as Vyasabhasya.

6. **Smrti Period :-**

The period of Smrti literature starts from the times of Patanjali. A few Smrties had been composed before 500 B.C. and they continued to be written till about 1000 A.D. It is in this period that a lot of changes in the previously prevailing ideas, beliefs, worship rituals and customs can be observed. The Smrties tried to combine yoga with daily rituals. This is the reason we find Pranayama certain purificatory techniques occupying important place in every ritual. 27 Smrties form a collection which is available in print. One of the important older Smrties, namely, Brhadyogi-Yajnavalkya Smrti has been critically edited and published by the kaivalyadhama, Lonavla.

7. **Pauranic Period :-**

The Puranas are a class of literature which has existed from very ancient times. The extant Puranas are recast made of the ancient Puranas during the first century. Many of these deal with Yogangas. The Puranas have received substantial additions over the years.
There are also Upa-Puranas. The nature of this is sectarian. In these, descriptions of philosophies and practices of different sects are usually found.

8. **Medieval Period :-**

**Tantra Stage :-** A vast literature on Tantras was produced during this age. Tantras are of various kinds. There are Buddhist Tantras, Hindu Tantras and Jain Tantras. Tantras are often associated with Sakti-worship. It is difficult to say which Tantras originated first. There are a large number of subjects included in the Tantras. The period between the seventh and twelfth century was the period of Tantrika works and cults, both Hindu and Buddhist. It was the Tantrikas that substituted the Yoga of enjoyment for the Yoga of abstinence and asceticism.

**Natha Cult :-** Tantrism developed into Rajayoga and Sahajayana of Buddhists. Hathayoga evolved as an aid to Rajayoga and became very popular through the Natha Cult. Several of the Hathayogic practices seem to have their origin in Tantrism. A lot of emphasis was laid on preparing the body as a source for higher spiritual experiences by the Nathayoga. It is this Yoga which has gained popularity throughout the world now.

**Bhakti Cult :-** Yoga also has an impact on Bhakti literature. A lot of writings based on the Bhakti have been written by saints and depending on their background they refer to Yoga practices now and then.

9. **Modern Period :-**

The tradition of Yoga continues even today. In modern times Swami Vivekananda made Yoga popular. The message of yoga was spread in other countries by Swami Ramatirtha and Paramhamsa Yogananda. Ramana Maharsi, Sri Aurobindo and Swami Sivananda of Rishikesh are significant names of modern exponents of Yoga.

Patanjali’s Yoga Sutras has made a significant contribution to yoga which is known as the eight limbed Yoga, popularly known as ‘Astanga
Yoga’. It gives a systematic and comprehensive approach for developing the mind. The eight limbs are called Yam, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana,

Samadhi. Of these, the first five are combined under a general heading Bahiranga Yoga in this Bahiriindriyas are used. It is used for indirect control of mind.

The last three limbs are referred to as Antaranga Yoga; the mind used directly for culturing itself.

The Various Yogic practices may be classified into:

Yama, Niyama, Asanas, Pranayamas, Bandhas and Mudras, Kriyas, Meditation

Yama (Principles of moral code)

- Ahimsa- A principle of non-violence
- Satya- A principle of Truthfulness
- Asteya- A principle of non stealing
- Brahmacharya- Continence/Celibacy
- Aparigrah- A principle of non-hoarding or non possessiveness

Niyama (Personal Disciplines)

- Shoucha- Purity
- Santosh- Contentment satisfaction; being satisfied with what one has.
- Tapa- Endurance
- Swadhyaya- self study (study of the vedic scriptures)
- Eshwar Parnidhan- dedication surrender to God (or worship of)

Asanas

- The word refers to certain patterns of body posture which play an important role in stabilizing the mind and the body. These also promote health.
These aim at improving muscle tone by establishing proper rhythm in the neuromuscular tonic impulses.

Pranayama

The pranayama consists of certain practices which are done in control of respiratory impulses. These impulses form one of the main channels of the flow of automatic nerve currents.

Pranayama is said to be an important Yoganga and it is widely entertained in the works of the earliest times. The word Pranayama is composed of “Prana” and “ayama” which means control or regulation of “Prana”. We have therefore to get our ideas clear about “Pranana” itself.

The word “Prana’ is derived from the root “an’ with prefix “pra’. The verb and its form occur in the Rgveda and in various passages “Prana’ means simply “breath”. In the Upanisads Prana becomes the vital force or the principle of all beings, the symbol of Brahma.

“Pranayama without any inhalation or exhalation, in which the breath is retained with ease is known as Kevala Khumbhaka”.

The Hathapradipika describes eight varieties of Sahita Kumbhaka, namely, Suryabhedana, Ujjayi, Sitkari, Sitali, Bhastrika, Bhramari, Murecha and Plavini. Gheranda Samhita Omits Sitkari and Plavani from Hathapradipika and substitutes Sahita and Kevali, thus completing the number of eight varieties.

The important features of the varieties of Pranayama may be described as follows:

1. Suryabhedana
2. Ujjayi
3. Sitkari
4. Sitali
5. Bhastrika
6. Bhramari
The various yogic practices are classified into Yama, Niyama, Asanas, Pranayamas, Bandhas and Mudras, Kriyas and Meditation. Its importance for the spiritual attainments has been recognised by all systems of Indian philosophy.

**Mudras and Bandhas**

**Mudras**

Mudra is characteristic term coming from the tantric literature and has several meanings. It means first i) Bodily posture with a good gesture. ii) Peculiar position of hands and fingers. iii) Parched grains. iv) A woman associate in Tantrika sadhana. v) Control of certain organs and senses that help in concentration.

The word ‘Mudra’ is composed of ‘Mud’ and ‘ra’. The meaning of ‘Mud’ is ‘to rejoice or to be happy’ and ‘ra’ means ‘to give’ according to Sarada Tilaka. Raghavabhatta commenting upon Sarada Tilaka 23:106 explains ‘ra dane/mudam rati dadati iti mudra /’ meaning that mudra gives a sense of well being and happiness

**Bandhas**

Bandhas are sub group of Mudras and are very few in number. They are usually practised as an essential part of the Pranayama in Hathayogic tradition. Some of them are otherwise practised independently. We may say that those Mudras that are practised in the technique of Pranayama are called Bandhas. They bind the current of Prana in particular region or channelize the pranic currents in a particular direction. The commonly practised Bandhas and their locations are as under:
**Name of Bandhas** | **Location or areas**
--- | ---
1. Jalandhara Bandha- | The throat.
2. Uddiyana Bandha- | The abdomen.

**Kriyas**

These are cleaning processes, usually classified into six divisions and therefore they are often called Shatkarmas or Shatkriyas. 1) Neti 2) Dhauti 3) Basti 4) Nauli 5) Kapalbhati and 6) Tratka.

Each one of this consist of many subsections.

**Meditation:**

- Meditation is generally an inwardly oriented, personal practice, that leads to a state of consciousness that brings serenity, clarity, and bliss.
- The term refers to a continuum of mental practices which range from initial withdrawal of sense of the complete oblivion the external environment.
- There are several stages and practices which can be included under this head.
- For individuals practicing yogic practices, an adequate substratum is formed by putting into effect a mode of self-imposed code of conduct technically known as Yamas and Niyamas.
- The Yamas and Niyamas form the very basis of Yoga and they are considered to be an essential part of yogic routine, however on a mild scale.
- The very nature of all yogic practices is largely psycho-physiological.
Some practices emphasizing control of mental processes directly are more psychological.

It is the letter part of this yogic practice that has become more popular and is being extensively used for the maintenance of health.

Realizing the importance of yoga in our day to day life, the government of India has started to observe 21th June as International Yoga Day.

1.4.2 History of Volleyball

Origin and Development of the Game:

In the middle of a lot of confusion and excitement, a few middle-aged-men were tapping and punching a rubber ball. Their attempt was to send it back and forth over a rope which was stretched across a gymnasium floor and some other men just stood by, keenly observing what appeared to be a strange new sport. This is a scene narrated from one evening in 1895, at the Y.M.C.A., Holyoke (U.S.A.). It is believed that the event was evidently an experiment by foresighted sports enthusiast named William G. Morgan, who later came to be known to the world as the ‘Father of Volleyball’. Little did he know then that he had invented a great game that would ultimately achieve inter-national fame.

The circumstances that led to the origin of Volleyball are interesting. A young Men’s Christian Association at Holyoke, had a young physical director named William Morgan. The primary responsibility of Morgan was one of organisation of recreational activities for the members of the association.

Morgan faced an unexpected problem one day as he gazed baffled at some businessmen who were in poor shape and who had just joined the Association. Morgan thought there was no activity suitable for them. To quote Morgan, “We needed a game they could play. As I believed, it was
recreation more than anything else they needed and there seemed to be nothing to just meet their needs.” He grew aware of the fact that the middle-aged businessmen, who had been neglecting physical exercise for several years should have a mild type of sport.

The Volleyball which used to be a neglected game has now most certainly begun to hold its own at an almost unbelievable level. Volleyball has now become a “cut”, with a lot of followers and enthusiasts. It is said that the game ‘gets into the blood’ of the players and spectators to such an extent that almost every girl and boy that gets an opportunity, wants to have a try-out at it. The reason for this lies in the fact that it is fairly easy for a beginner to understand the fundamentals or to learn the basic skills required for the game. It is non-complicated and has its own appeal for the higher values of sport and recreation. Besides, it suits the average Indian pocket, for the expense this game incurs is little.

As the renaissance of Indian sport set in, Volleyball ascended to a position above the par of many other games. Currently, competitions and coaching schemes are regularly organised in the country which offer encouragement and certain facilities to the sport minded youth. Although the training facilities in India are often considered to be inferior to what is currently at hand in the affluent nations, it is also true that the present – day sports-person in India is sharing and enjoying fast developing conveniences which are in a continual process of elevation in standard. As all the techniques in volleyball too are developing at a break-neck speed, it becomes extremely important to keep in touch with advancing trends in the field of this wholesome team-sport.

Volleyball is said to be an excellent all–round team-sport, and it has, over the years, become widely accepted as a highly competitive and recreational game throughout the world. Since its inception in 1895, it has
not only evolved from a slow-moving game to a fast one, but has also become a game of high interest, enthusiasm and joy to the players and spectators alike. It is interesting to note that the speed of a powerfully spiked ball is about 45 metres per second in a volleyball game which is much faster than the movement of the ball in most other games. Also, the game offers a wide opportunity for the development of strength, speed, endurance, agility, neuro-muscular skills and coordination of all parts of the body through the actions involved in the game such as running, jumping, bending, stretching and other movements, all of which demand balance and poise. The game demands coordinated team-work and therefore, it plays an important role in instilling in every player a sense of personal and group responsibility by his individual performance and his ability to work together with the rest of the team. Volleyball, if and when trained and practiced under sound leadership, creates and sharpens qualities of honesty, sportsmanship and fair play in those who participate in it.

Volleyball has an added advantage of being suitable for both the sexes, regardless of their age and physical ability. It is a highly adaptable sport. It is a game which is very easy to learn. There is no body contact between opponents in this game and as such, there is little danger of serious injuries. Another advantage is that the game requires only a small play area and the equipment which is needed for the game is affordable to all income groups. Since the game is adaptable to both the sexes, it offers opportunities for healthy social contacts among men and women of all races. Volleyball has immense recreational and carry-over values and therefore it meets all the requirements of an ideal sport involving physical activity.

Morgan thought long and hard about this till a bright idea struck him and he decided to experiment. He assembled all the businessmen and
instructed them to get into their athletic outfit. The businessmen quickly dressed for the task, demonstrating their eagerness to rid themselves of their stiff joints and get some exercise. Morgan soon formed two teams and they were made to stand on either side of a rope stretched across the gymnasium. Morgan then threw an inflated basketball bladder and asked the group to hit it with the hand and send it from one side to other. The game started and the ball flew over the improvised net in quick succession. The situation became tense and the participants ran helter-skelter, all eager to get at the ball. The game lasted for a few minutes. Exhausted completely, the men dragged themselves home but determined to go to the gymnasium again. They were there next day and became regular visitors. Morgan’s experiment proved a success and a new game was born, and Holyoke became the birthplace of Volleyball.

The businessman liked the game. According to Morgan himself, “Our staid businessmen used to forget themselves and they jumped right into the sport to enjoy themselves.” The game soon developed a new look, as a net and a specially made leather ball were introduced. Also, soon a few simple rules were formulated which enabled organised play and competition between the teams. Morgan originally named the game, he invented as ‘Mintonnetts’. It was Dr. A.T. Halstead of Springfield College who once suggested changing the name to ‘Volleyball’ as he witnessed a game. The name proved more appropriate as the basic idea of the game was volleying. His suggestion quickly gained acceptance and Morgan’s game came to be known as Volleyball.

Though, initially the general public did not develop an interest for the game of Volleyball, Morgan’s gymnasium continued to organise games of the play for the members and they enjoyed it is a splendid recreational activity. It was in 1896 during a Physical Director’s Conference at Springfield College that Morgan demonstrated the game by
preparing two teams, each consisting of five players. The delegates present at the conference were impressed by the new game. They began to put in efforts in order to promote and popularise it in their own communities subsequently by taking necessary steps. Soon, many schools, colleges and community centres in the United States introduced the game in their programmes. It was introduced both as an indoor and outdoor sport. Volleyball gained maximum momentum when the Public Playground Movement was launched. As a result of the movement, no playground was considered complete without a Volleyball court. An increasing number of people were attracted to it and the number of participants quickly multiplied. The original rules of Volleyball were framed by the founder himself. The rules were revised in 1900 and since then, they have undergone many additions and modifications as the game developed and became more specialized.

**Volleyball around the World:**

Volleyball soon moved out of the boundaries of its homeland which was the U.S.A. Canada, a close neighbour, was the first to introduce the game in 1900. The next country to introduce the game was Cuba, in 1905. Y.M.C.A, a world-wide organisation, put in a lot of efforts which helped the game spread from one country to another. The physical directors at Y.M.C.A. took the game with them wherever they went. During the First World War, volleyball became a popular army sport and a lot of American soldiers promoted the game in several parts of the globe. From 1918, national volleyball federations started making their appearance. U.S.S.R., Japan, France were among the earliest. Volleyball has now spread far and wide and it is played by men and women throughout the world.

Volleyball has now established itself as an international game. But it took a lot of years and efforts in order to gain this status. The first step
towards the achievement was taken in Berlin, during the Olympic Games of 1936. Representatives of several countries which were interested in volleyball met. In 1947, the International Volleyball Association was established with its headquarters in Paris. The first Official Men’s World Volleyball Championship was held in 1949 at Prague. Twelve countries were represented at this event. Reports prove that this Championship was organised and held at the Winter Stadium and thousands of people witnessed the proceedings each day. U.S.S.R. became the first champion at the Championship, defeating Czechoslovakia in the final game. The International Volleyball Rules were formulated in 1951, and in 1952, the Men’s Second and Women’s First World Championships were held in Moscow. World championship has now become a regular feature and hundreds of players in different parts of the world prepare themselves seriously to share the thrills of competitive Volleyball.

Volleyball was first included in the Olympics in 1964 in Tokyo. Now every four years, leading national teams meet and vie with one another for the Olympic title.

According to the resolution passed by the International Volleyball Federation (FIVB), a World Cup Super Tournament (for men and women) was introduced for the FUJI CUP in 1980 and played on Round Robin system at various centres among four national teams, viz., U.S.S.R., Cuba, Japan and a national team of the host country or a team allowed by the International Volleyball Association (IVA), which is recognised as the first professional Volleyball league in the world. It was founded by a group of entertainment-oriented entrepreneurs after seeing the 1972 Munich Olympics.

The first Asian Volleyball Championship was held in Tokyo, in 1955. India won the title and Japan stood second in the ‘six player’s
volleyball’. It can also be noted that a ‘nine player’s volleyball’ was also popular at the time in countries like, Japan, Korea, Thailand, and Hong Kong. The second Asian Volleyball Championship was held at Tokyo as a part of the Third Asian Games in 1958.

**Volleyball in India:**

During the early part of the 30th century, the game of Volleyball was introduced in India by the international organisation Y.M.C.A. The Y.M.C.A. College of Physical education at Madras was one of the first institutions to take up Volleyball. The physical education teachers which were trained there are the ones that took the game to almost all parts of the Indian sub-continent. In the modern day scenario, the game has gained popularity throughout the length and breadth of the country, be it in schools, colleges, public playgrounds, even stretching to the villages and rural areas. The game is getting increasingly well known day by day in all the states of the country. The vast number of varied tournaments, coaching camps, competitions, and other events conducted throughout the year in India are a clear testimony of the fact that the game has taken deep root on Indian soil. Volleyball is one of the games for inter-school and inter-collegiate championships in many places and inter-university championships are held every year.

The Volleyball Federation of India was set up in 1950. It functions as the controlling body and is responsible for promoting the game at the national level. It also coordinates the activities of all member associations. Most states in India organise annual state championships and the conduct of the national championships for men, women, boys and girls conducted every year is the highlight of the Indian Volleyball. The national championships of Volleyball were started in India in 1952 for men, 1953 for women, 1956 for junior boys, and 1975 for junior girls. Further, 1979 introduced a new event called Federation Volleyball
Tournament for men and women. In 1980, the All India Inter-Zonal Sub-senior Volleyball Tournament was started for the age group 18 to 22 years. In addition to these, several local and open tournaments are conducted by sports clubs and other agencies all over the country. The first Indian team to participate in the World Volleyball Championship for men was selected at Calcutta and the event was held at Moscow in 1952. This was India’s first experience in the International field. The team could only achieve the eighth place in the championship. At the first Asian Volleyball Championship in 1955, India had the distinction of winning the Asian title. In addition to competitive programmes, training and coaching schemes also have been implemented under the direction of Indian and foreign expert coaches.

**Recent Trends:**

Volleyball is progressing tremendously all over the world and it is recognised as one of the leading sports in many countries. The game is now played in thousands of cities and towns, schools, colleges, public playgrounds. Volleyball is played both indoors and outdoors.

Volleyball is played all over the world but its popularity depends on local standards. The standard largely depends on the national experience, popularity of the game and the type of training given to the teams. They play a scientific game based on efficient passing and powerful attacking.

So, we find the game of volleyball being played by boys and girls, men and women, all over the globe. It is a highly skilled game and the competitive element is predominant in it. To some others, it is a sport for fun and recreation.
Promotion of Volleyball:

Volleyball has still not reached its full potential and there is still some scope for this upcoming game to develop itself. The following suggestions are offered with a view to facilitate further progress:

1. Strengthen the national, state, district associations and local clubs.
2. Encourage more participation in school and colleges.
3. Promote Volleyball as a competitive as well as recreational sport.
4. Establish more training centres for coaches and officials.
5. Send the national team to all important international competitions.
6. Popularise the game among women.
7. Organise conferences and seminars.
8. Provide financial assistance for research.
9. Develop a system to utilise scientific information on physical conditioning, nutrition, and treatment of injuries.

Preparation for Volleyball:

In the process of training for any competitive sport, one must incorporate a form of athletic training which promises optimal results from all motor abilities and psychological characteristics which ultimately are essential to make the participant fit for arduous tasks.

The most primary objectives of preparation for competitive Volleyball aim at the attainment of a robust health coupled with certain physical qualities which are necessary for skill and endurance; attempts to attain perfection in techniques and tactics of the game; growth and development of the qualities necessary to change actions and manoeuvres according to conditions and situations which include the characteristics of opponents and external conditions.

The game demands a lot of physical preparation for the procedures practised for the development of health and physical fitness. A lot of training through different processes is needed to be followed to improve
the abilities in order to execute different flawless skills of the game in different game situations and these constitute technical preparation. Procedures which are followed to impart theoretical knowledge of the game constitute theoretical preparation.

**Important Attributes:**

To achieve volleyball-specific shape, a well-conditioned athlete must develop attributes such as flexibility, strength, power, and agility. Although this may seem obvious since all sports demand the development of these attributes, what is important is the type of flexibility and the types of strengths that determine whether or not a player has volleyball oriented fitness and shape. The fitness needs of volleyball players as far as flexibility is concerned are largely different from those of soccer players or swimmers. Their aspects of strength are also highly different from those of football players, baseball players or distance runners. The type of agility that must be developed is unlike that required in any other sport.

Like basketball players, volleyball players must have the ability to leap with agility and power – but at the same time, they also need to be able to hit a nine-ounce volleyball with a thunderous force while they are suspended midair. They should have the potential to leap to the net and block a spike that travels as fast as 100 miles per hour. They must also be swift enough to go from leaping to diving to the floor in a matter of seconds. Their reactions must be immediate, spontaneous and constant throughout a two-hour match in a manner unique to the sport. Because the fitness of volleyball players differs from those of other athletes, they must also train differently from other athletes. Volleyball has its own unique training puzzle that combines these variables. Following is an overview of the keys to achieving volleyball shape.
**Flexibility:**

The changes of injury are fairly minimised if an athlete is adequately flexible. It is also true that a player with great flexibility usually possesses great agility, strength, and power. It becomes especially imperative for volleyball players to develop an optimum range of motion in a special joint and its surrounding muscles because they must be able to perform well while also constantly finding themselves in awkward positions during a match. The greater the range of motion that the players have, the more easily their bodies can adapt to the very awkward and unusual positions the game require.

**Strength:**

Strength is the maximum force that can be applied by a muscle or group of muscles to perform a given task. The volleyball weighs nine ounces and when delivered by a powerful swing, it can reach speeds of up to 100 miles per hour. Good blockers possess the strength required to block the ball at the net without allowing their arms or hands to move backward. Players who have greater strength are usually the ones who will win the jousts at the net. They are capable of forcing balls through opponent’s hands and keeping balls from being forced through their own. Leg strength is equally important as it is responsible for the ability to make the split-second changes in direction required of players. With good leg strength comes a greater potential for all-around power.

**Power:**

Power refers to the amount of time and the amount of force that a player makes use of in order to perform a certain task within a fraction of a second. A powerful player has more velocity to the arm swing, and therefore can hit the ball with greater velocity than other players. Power also refers in a way to the ability to jump from the ground faster and ascend higher than other players. Players must explode from the floor,
spending as little time as possible on the floor to maximize the height of a jump.

**Agility:**

Volleyball players should have the ability to change direction in a split second and still maintain control and balance. They must also be able to react immediately to a coming spike. Players must be able to position themselves in an instant in order to make a block. Changing direction midair is required to adjust to the flight of the ball. Moreover, movements are specific to certain players in the game. For example, middle blockers must be able to jump up to 300 times in a five game match, exploding off the floor to combat opposing hitters and then making the transition to aid in the attack from their team’s side of the net.

The cornerstone of having a well-devised training and conditioning program for volleyball players aims at developing the performance factors such as flexibility, strength, power, and agility. However, this only accounts for a part of the equation. Some other skills can be discussed as follows:

**Skills of Volleyball:**

**The Serve:**

“Service is the act of putting the ball into play by the server hitting it with any part of the arm from within the service area and sending it over the net between the antennae into the opponent’s court.” But in competitive Volleyball, the term does not merely refer to the act of sending the ball across the net. It is rather an instrument of offence and what is of prime importance in a service is accuracy. Accuracy is more important fear than in many other departments of the game. The placement rather than the speed is the true determinant of effectiveness of service. Sending the ball to an unguarded opening in a simple manner may dislocate the technical combination of the opponents much more
than a service which sends the ball as a hard one served directly to a player. Serving the ball skillfully to selected spots on the opponent’s court is very often in making it difficult for them to defend and pass. On the other hand, service which is made directly towards a player will make things easy. Also, measures can always be taken by the opposing team to defend the ball, even if it is hard, as long as they know where it is coming. The ordinary, free service consists of hitting the ball in an underhand fashion and this service is meant for beginners and inexperienced players. The primary objective of this service is to send the ball over the net into the opponent’s court. Through training and practice, the beginner can develop accuracy and will be able to send the ball to a desired spot on the opponent’s side. Skill and exact accuracy can be developed through regular practice. Serving a ball straight until one can consistently serve the ball to the right spot is good practice. Over time, the player will find it easy to adopt successfully other kinds of service. The basic ability to serve accurately is enough to change it into any of the other types of service through proper training. Any experienced player has the potential to serve the ball with great force to a desired point. However, mastering such a service is not possible until the rudiment of the game is mastered. The right thing to do, therefore, is to start with simple service and pass on to difficult once, step by step.

**Service as a Tactical Weapon:**

A serve can be useful in a lot of ways during a game. It can be used effectively to regular the rhythm of a game and disrupt the opponent’s concentration level. In order to speed up the tempo of the game, players try to get the serving position as quickly as possible and then serve immediately after the whistle of the first referee. To slow down the game, players choose to walk slowly to the serve area and may take their time.
for a serve. The variations in serve always create some unpredictable situation for the receiving team.

**Underhand service:**

This is the easiest among all the various kinds of service. It is a good practice serve for beginners; at the same time, it also finds a place in championship games because of its practical youthfulness.

The technique involved in this serve is quite simple. One should assume the initial stance and then face the net with left foot forward in a comfortable position. The player must then hold the ball by the left hand with the fingers well spread out. Then raising the right arm backward, the player must be ready for the forward swing.

First, the player must toss the ball up, neither too high, nor too low, swing the right arm forward; move it closed to the right knee; and hit the ball with open hand. Then he must continue the arm action upwards as complete the action as a fine follow through which include raising the right hand and stepping forward with the right foot. In continuation, he must move into the court to join the team in defensive play.

There are various types of Underhand Service. There are as follows:

1. Underhand Right to Left Spin (Anti-clockwise)
2. Underhand Left to Right Spin (Clockwise)
3. Underhand Forward Spin
4. Underhand Backward Spin
5. Underhand Floater
6. Underhand elevator

**The Pass:**

“The pass is the action of sending the ball to the desired position after it is received”. The pass forms the backbone of modern volleyball as neither offensive nor defensive systems can be successfully implemented
by any team if its players are poor in the pass. Therefore, the success of any system of play depends largely on the degree to which the team has developed and perfected the art of passing. Perfection in the pass can be achieved by constant practice using correct techniques.

A lot of different kinds of passes are common in the game. They are classified into two main categories which include (a) General Pass (b) Set-up Pass. The general pass includes overhead pass, one-hand pass, underhand pass, and one-hand underhand pass.

1) Underhand Pass:

When a player is tired, slow or in an uncomfortable or awkward position, the player seeks an alternative or easier method. It is also true that now the general practice almost everywhere is to receive and pass the served ball in an underhand fashion. As a result of this revolutionary change, the underhand pass has become very significant and has gained greater technical importance. It is therefore quite necessary for every player to develop extreme proficiency at the art of underhand passing.

**The Technique:**


Arms Straight at 90 degrees: Be “ready” with arms at 90 degrees from your body. Bend at the waist- shoulders forward- hips back. Maintain 90 degree angle between arms and upper body. Legs should also bend.

**Sweet Spot:** The ball should come off the same spot on the lower forearms each time. (just about the wrists) The ball should be contacted at hip level as often as possible.

**Hips and One:** Keep hips back during pass. If you need to swing your arms, swing them in only one direction (toward target) while passing.
Redirect: Make sure your forearms face in the direction you want the ball to go. Start out facing the server, and always face the ball when you pass.

Shuffle Steps: Move to the ball without crossing your feet. Try to get the spot before the ball dose. Do not take long steps to reach the ball.

Consistent contact Point: Contact the ball with your forearms holding both hands together. Try to play the ball at the hip level and receive the ball close to the body line.

Tips for efficient Passing:

A good pass is crucial to have an effective offence. Passing can be described as a controlled redirection of the ball to the setter, and it is very important for the players to remember this.

The following are the keys to good passing. Assess your own passing to determine which keys you can improve, then work on them one at a time until you are a great passer.

Be ready: This means that you are bending yours knees (low) and ready to move in any direction. You are on your toes.

Concentrate on the server’s body: The best means to predict the direction of serve is the passer should look for the angle of the server’s shoulders, where the forward foot pointing and the direction of the hitting arm.

Anticipate and communicate: The entire team communicates who will be passing the ball before the serve even crosses the net. The player who wants to pass yells “Mine” and the other players yell “good” or “Out”.

Beat the Ball: You must arrive at the spot where you will pass before the ball does. Don’t arrive just in time.

Control your Body Position: Anticipate the ball and control your body position when you pass. Any extra movement makes it more difficult to pass correctly.
Keep your Arms flat and away from your Body: Do not bend your elbows or keep your arms too close to your body. Your forearms must provides a large, flat platform for deflecting the ball.

Do not Swing Your Arms: When the ball is travelling quickly, you don’t need to add extra momentum to it. If you need to add a little force to the ball, used your legs or shrug shoulder instead of swinging your arms.

The Spike: Spiking is the art of smashing down the ball over the net into the opponent’s court. It is often known as the strongest weapon of offence and it creates the most spectacular and colourful part of the game. Without spiking, volleyball becomes a soft game. A team can have a strong attacking side if it has a lot of powerful spikers that are in their best physical condition.

A lot of practice and training goes into the development of spiking skills. There are different styles of spiking and every champion player may have his own peculiar way of spiking the ball which may often differ from others in certain details. Nevertheless, in all cases of spiking, the fundamentals are the same. Some of the important factors and the basic principles are as follows

A spiker is required to be physically fit and preferably tall. Short persons can make good spikers if they make up for their lack of height by good jumping skills. The most basic requisite to good spiking is a powerful spring. Good stamina and adequate power in the legs to jump continuously for a long period are certain traits that a spiker must possess. He should have the ability to jump up by taking a couple of steps as well as from a standing position. Very often, players waste energy by running three meters or more before they spike. This is not a wise decision as they run more than what is necessary, and as a result of too much running, the spiker gets exhausted, especially when there are quick exchanges. What is
important in modern volleyball is quickness and spikers should develop the spring of a wild cat.

The Block:

Blocking is a method of countering the effectiveness of a spiked ball by jumping and raising the hands above the net. Blocking forms the first line of defence. The block is essential to counteract the spike, which otherwise creates complicated problems for the defenders. Experienced players are also aware of the fact that the block serves as a psychological barrier to the attacker. When the spiker comes to know that someone is waiting to trap him, he is naturally worried. On the other hand. If there is no guard, he has nothing to fear.

General technique:

Good blocking involves two important factors one is time and second place. If the hands are presented over the net at the right place, at the right time, it will bring about satisfactory results, Blocking, therefore, requires keen anticipation and well-timed action.

1.5 Need of the Study

1. To know if there is any benefit of yogic exercises with regard to volleyball skills.
2. To spread the awareness of the benefits of yogic exercises.
3. To know if there is any benefit of yogic exercises with regard to improvement of agility in sportsmen.
4. To know if there is any benefit of yogic exercises with regard to improvement of flexibility in sportsmen.
5. To know if there is any benefit of yogic exercises with regard to improvement of strength in sportsmen.
6. The study may help to know if yogic practices would help in improving the concentration and focus of sportsmen.
7. This study may contribute new knowledge and literature for volleyball game which would be beneficial to coaches and players.

1.6 Scope of the Study

No study of this nature has been done in this geographical area. Yoga has been gaining a lot importance day by day because of its various physical and mental benefits. There has been an increase the awareness of Yoga Asanas in society, across all ages, genders and groups. Yoga is not only helpful in developing physical fitness but also improving the concentration and focus of every individual practicing it. The present study not only is helpful to the sportsman but also in developing the skills of various games. Eg Volleyball. The present study will create awareness among the masses regarding the correlation of yoga and other sports. This study will help them to improve their sports skill and physical fitness of all the sports personals and as well as the society

1.7 Significance of the Study

1. The study would help to understand the relation of yogic exercises and its effect on volleyball service skill.
2. The study would help in understanding the relation of yogic exercises and its effect on volleyball passing skill.
3. The study would help in understanding the volleyball game in a much better way.
4. The study would help in knowing the relation of yogic exercises and the agility of volleyball players.
5. The study would help in knowing the relation of yogic exercises and the strength of volleyball players.
6. The study would help to know the relation of yogic exercises and the flexibility of volleyball players.
7. The study would be helpful in enhancing the fitness of volleyball players.
8. The study would be helpful in enhancing the volleyball skills.
9. The study would be helpful to the coaches and players in understanding the game.

1.8 Statement of the Problem
“EFFECT OF YOGIC PRACTICES ON SELECTED PHYSICAL FITNESS COMPONENTS AND SKILLS OF VOLLEYBALL PLAYERS”

1.9 Objectives of the Study
The researcher has undertaken this study with the following objectives.
1. To study the effect of yogic exercises on the flexibility of the lower back and posterior thigh of the volleyball players measured by sit and reach test.
2. To study the effect of yogic exercises on the flexibility of the back i.e. hyperextension of the spine measured by bridge up test.
3. To study the effect of yogic exercises on the agility of volleyball players measured by shuttle run.
4. To study the effect of yogic exercises on the agility of volleyball players measured by SEMO Agility test.
5. To study the effect of yogic exercises on the explosive strength of volleyball players measured by Standing Broad Jump.
6. To study the effect of yogic exercises on the upper body muscle strength and endurance of volleyball players measured by pull ups test.
7. To know the effect of yogic exercises on volleyball service skill test.
8. To know the effect of yogic exercises on volleyball passing skill test.
1.10 Hypothesis of the study

The research topic undertaken in this study has been justified with a sound review of literature. Based on this, the researcher hypothesized that the following hypothesis based on objectives of the study;

\( H_{01} \): There will be no significant effect of yogic exercises on the flexibility of the lower back and posterior thigh of the volleyball players measured by sit and reach test.

\( H_{02} \): There will be no significant effect of yogic exercises on the flexibility of the back i.e. hyperextension of the spine measured by bridge up test.

\( H_{03} \): There will be no significant to study the effect of yogic exercises on the agility of volleyball players measured by shuttle run.

\( H_{04} \): There will be no significant to study the effect of yogic exercises on the agility of volleyball players measured by SEMO Agility test.

\( H_{05} \): There will be no significant to study the effect of yogic exercises on the explosive strength of volleyball players measured by Standing Broad Jump.

\( H_{06} \): There will be no significant to study the effect of yogic exercises on the upper body muscle strength and endurance of volleyball players measured by pull ups test.

\( H_{07} \): There will be no significant to know the effect of yogic exercises on volleyball service skill test.

\( H_{08} \): There will be no significant to know the effect of yogic exercises on volleyball passing skill test.
1.11 Definition of the Terms Used

i) Conceptual Definition

**Suryanamaskar** – Although this exercise is considered for this research it is not yogic exercise especially when student practices the reason for this statement is “Suryanamaskar” is dynamic in nature and yogic exercises are static in nature.

**Asana** - Asana means a state of being in which one can remain physically and mentally steady, calm, quite & comfortable.

**Pranayama** – Pranayama means controlled breathing or regulating the normal motion of breath Pranayama is generally defined as breath control.

**Yoga** – Yoga is an efficient method of toning muscles and vital organs is the ideas method of ensuring good health and fitness. And it is beneficial to Integration of personality and whole body effective. i.e. physical, mental, social, emotional, moral.

**Shuddhikriya** – These are purificatory processes usually classified into six divisions and therefore, these are often called Shatkriyas. These are Dhauti, Basti, Neti, Trataka, Nauli, and Kapalbhati.

**Meditation** – The practice of meditation involves a whole, peculiar and special process of absorption in which the individual turns his attention or awareness to dwell upon a single object, sound, concept or experience. Traditionally the aim of this practice has been ‘enlightenment’

**Yogic Exercise** – All Yogic exercises are psycho – physiological in nature and all these individually or collectively help to attain the objective of yoga.

**Skills** – Skills are the abilities of one’s outcome in exhibiting better performance by motor action. Skill is defined as automatisation of motor procedure.
**Volleyball** – volleyball is a team sports in which two teams of six players are separated by a net, each team tries to score points by grounding a ball on the other teams court

**Service** – a player stands behind the inline and serves the ball in an attempt to drive it in the opponent’s court.

**Pass**- Also called reception the pass is the attempt by a team to properly handle the opponents serve or any form of attack.

**Physical fitness**- Physical fitness is the sum of the five motor abilities namely. Strength, Endurance, Speed, Flexibility, Agility, co-coordinative abilities. It is ability of the body to carry out everyday activities with the little fatigue and with enough energy left for emergencies. Each sport requires different type of fitness training.

**Agility** – Agility means ability of quick and swift movements and ability of quick apprehension of body movements as used in physical education and sports, agility may be defined as “ones controlled ability to change body position and direction rapidly and accurately”.

**Flexibility** – flexibility may be defined as “the range of motion around a joint as determined by the elasticity of the muscles, tendons and ligaments associated with the joint under consideration”.

**Strength** – strength is the ability to overcome resistance or to act against resistance.

**Junior Boys** – Junior is a player 18 and under, who is still legally protected by a parent or guardian is called Junior Boys.

ii) Operational Definition

**Asana** – “Any of the postures in yoga exercise”.

“A posture or manner of sitting as in the practice of yoga”.

**Pranayama** – Scientific method of breathing take deep and long breath to the nose.

**Shuddhikriya** – means the act of cleansing process.
Meditation – is a state of extreme relaxation and concentration in which
the body is generally at rest and the mind quieted of surface thoughts.

Yoga – If any posture is performing by an individual in comfortable
position that is called Yogasana.

Effect – It is the significant difference between the group means of pre-
test mid-test, and post-test variables.

Yogic Exercise – For the present study, Yoga practices are the
components of yoga such as Asanas, Pranayamas, kriyas, meditations,
Om chanting. Asanas are understood as posture Pranayamas are known as
controlled breathing. Kriyas are called as cleansing process and Om
chanting is the recitation of the world “Om” as per yoga tradition.

Skills – For the present study, denotes the level of smooth effectiveness
and body coordination with motor action can be done is called skills.

Volleyball – A game played on a court by two teams who hit-light and
inflated ball back and over a high net with the hands and each team trying
to return the ball before touches the ground.

Service – This action puts the ball into play. server uses a hand to send
the ball over the net in to the opposing court.

Pass – A pass is the ball hitting the middle of your fore arm and it going
to the other player.

Physical Fitness – Is an ability to be physically active and the ability to
function efficiently and effectively without fatigue.

Health – Health according to WHO (World Health Organisation) refers
to such qualities as physical, mental, social, an emotional, it is not limited
to the merely absence of disease and infirmity it means total health.

Health Related Physical Fitness – Health Related Physical Fitness is
multiple ability to successfully performed the life long activities with a
balance functioning of one’s psycho-neuro-physio-biochemical and
hormonal attributes in maintaining health all along components of health related physical fitness.

**Strength** – Strength is the ability to overcome resistance or to act against resistance. It is an ability or capacity of a muscle or a muscle group to expert force against the resistance.

**Flexibility** – The range of movement possible at various joints. Flexibility is an ability to move freely throughout a full non restricted and pain free range of motion at a joints.

**Agility** – The ability of the body to change the direction quickly. Capacity of the body parts of the body to change direction rapidly and accurately.

**Standing Height** – It is the straight length of the volleyball players upto the point of vertex and recorded in meters and centimetres.

**Junior Boys** - Those players who are eligible to play under the age group of 16-18 years.

1.12 **Limitations of the Study**

To conduct this research and training program necessary steps with proper care, the researcher observe some shortcoming, which have been recorded in this section as follows.

1. The study is limited to the junior boys of Pimpri Chinchwad are only.
2. The study is limited to the junior boys of the age group 16-18 years only.
3. The study is limited to volleyball and yoga.

1.13 **Delimitations of the Study**

Since the researcher had to work very hard for adopting health related physical fitness factor tests, volleyball skill tests and twelve week
yoga training program with proper planning within the limited time, researcher could delimited the study as follows.

1. The study is delimited to effect of yogic exercises on volleyball skills. viz, service and passing in volleyball.
2. Samples will be selected from Pimpri Chinchwad area only.
3. The study is delimited to one hour forty minute training in a day and six days in a week.
4. The study is delimited to yoga, physical fitness factors and volleyball game only.
5. The study is delimited to only service and passing skill in volleyball.
6. The study is delimited to only physical fitness factors like agility, flexibility and strength.
7. The study is delimited to Twelve week.

1.14 Chapter Scheme

Chapter I : Introduction
Chapter II : Review of Related Literature
Chapter III : Plan and Procedure
Chapter IV : Analysis and Interpretation of Data
Chapter V : Summary, Conclusions, Suggestions and Suggestions for further Research
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