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An Analysis upon Impact of Yogic Practices on the Development of Endurance and Playing Ability in Kabaddi Players

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Abstract – A team game with no equipment, breathe holding act, which tones up the brain; these are two outstanding features, which make kabaddi a unique team game 'Kabaddi is real common man's game, with very simply technique of Tag Game-a game of touch. It need no special costume, costly equipment reservation of club. Kabaddi favors body development with a muscular strength stamina and endurance; because of its special feature "Cant holding" enriches cardiovascular endurance and resistance. Fine flexibility and agility is developed as one needs to move faster in such a small area of 20'--30' [10-12mts]. Player's eyes and body movement become quicker. Psychological major pressure of holding cent make one to control mind and movement. Psychologically he has to concentrate on his reaction time with estimate energy and space. His physical movement are linked with the close movement of his opponent, in coordination with his teammates.

The reason for the study is to figure out the impact of complex preparing with yogic practices on chosen engine fitness variables and playing capacity around men Kabaddi players. To attain this motivation behind the study sixty male Kabaddi players.

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INTRODUCTION:-

Kabaddi is a game of speed, strength, strategy and, most importantly, lungpower. First you'll need twentyfour people split into two teams of twelve. Only seven players per team are on the playing field at the same time. The remaining teammates are reserves that can "sub in" later. The two teams go to opposite sides of the field, which is divided in two equal sections. Flip to see who goes first. That team starts out on offense and the two team's alternate offense/defense each turn until the game is over.

Here's where it gets interesting. The offending team sends out their "raider" to the enemy side of the field, where he must try to touch as many opposing teammates as possible before returning safely to his side of the court. The catch? He must do all of this while telling "Kabaddi, Kabaddi, Kabaddi, Kabaddi..." repeatedly and in one long breath. And the best part is: we're not making this up! This is a REAL SPORT!

If he makes it back to safety in one breath, everyone he tagged has to leave and the offense gets a point for each of them. In addition, they may "revive" a teammate that was previously tagged out for each enemy that gets the boot. If the raider doesn't make it back, the defending team gets a point and the raider has to leave the field until he can be "revived". If a team succeeds in getting the entire other team out, they score a "lona" and get an extra two points. Play then continues by putting all players on both sides back on the field. The team with the most points after two 20- minute rounds wins the game. Of course the defenders try to hold the poor raider down so that he runs out of "Kabaddis" on their own turf. These larger chaps are known as "stoppers". To make things more interesting (and fair) each team can only have four stoppers on the field at once, and only one stopper can try to stop a raider at any given time.

Other current variations of the game thrive throughout the world today, including a version called "Gaminee" where players can't be revived. Instead the game is over when one of the teams is completely wiped out. As for the game's history? While there are no actual records anywhere, there is apparently concrete evidence somewhere that suggests Kabaddi was developed about 4000 years ago to help Indian soldiers develop their self-defense skills (not to mention their pronunciation of the word Kabaddi skills).

Today the game is played worldwide. (Yes, there's an American Kabaddi team.) There's even an official

Kabaddi organization, the Kabaddi Federation of India (KFI), founded in 1950 that regulates play and rules and keeps a bunch of records and stuff. Not ready for the big leagues? Try the Amateur Kabaddi Federation (AKFI).

Yoga, the Indian science to control body and mind through meditation and self-control plays an integral part of Kabaddi. The raider has to enter the opponent's court chanting the word 'Kabaddi' while holding his breath and has to continue to do so until he returns to his home court. This is known as 'cant', which is closely related to 'pranayama' of yoga. While pranayama is about withholding breath in order to exercise internal organs, cant is the means to withhold breath with vigorous physical activity. This is perhaps one of the few sports to combine yoga with hectic physical activity. The game calls for agility, good lung capacity, muscular coordinates, presence of mind and quick responses. For a single player to take on seven opponents is no mean task, requires dare as well as an ability to concentrate and anticipate the opponent's moves. (Rao, 2002).

Training: The word 'Training' has been a part of human language since ancient times. It denotes the process of preparation for some task. This process invariably extends to a number of days and even months and years. The term 'training' is widely used in sports. The regular and systematic use of physical exercise, however, does not guarantee maximum improvement in performance. The effect of these exercises is increased or decreased by a multitude of factors. Some of these factors, if ignored, lead to a drastic reduction in the efficacy of physical exercise. The complex nature of sports training involving physical exercise along with other means becomes obvious when one looks at the training of advanced sports persons. The training of advanced sports persons is significantly supported by means and measures from several sports science disciplines e.g., sports medicine, sports physiology, nutrition, physiotherapy, sports psychology, sports biomechanics and so on. The training for specific sports is based on motor abilities viz. strength, speed, endurance, flexibility and coordinative abilities. Few sports are dominated by specific motor ability along with all other in supportive action.

Endurance: Endurance is a very important ability in sports. Endurance is the product of all psychic and physical organs and systems. No other motor ability depends so much on the working capacity of complete psycho-physical apparatus of humans as endurance. All other performance factors depend on one or more parts of this psycho-physical apparatus and as a result are directly or indirectly affected by endurance.

Endurance like any other motor ability is a conditional ability. It is primarily determined by energy liberation processes. The ability of the human body to maintain a certain level of energy production forms the physiological basis of endurance. Endurance is directly or indirectly of high importance in all sports. It is however not easy to define endurance, but there is agreement regarding the following aspects endurance: it related to doing work for a long time of period, it relates to working under fatigue conditions, it involves a large number of muscles and it involves work efficiency. Harre (1986) defines endurance as the ability to resist fatigue, Thiess and Schnable (1987) also defines endurance as the resistance ability to fatigue. Martin (1979) and Matwejew (1981) have also used to the concept of ability to resist fatigue, for defining endurance. "Endurance is the ability to do sports movements, with the desired quality and speed, under conditions of fatigue."

There are many types of endurance which are classified according to nature of activity viz. basic endurance. general endurance and specific endurance; classification according to duration of activity viz. speed endurance, short time endurance, medium time endurance and longtime endurance. Endurance is determine with various factors as: (1) Aerobic capacity - (a) Oxygen intake; (b) Oxygen transport; (c) Oxygen uptake; (d) Energy reserves, (2) Anaerobic capacity - (a) Phosphogens stores; (b) Buffer capacity; (c) Lactic acid tolerance; (d) Aerobic capacity, (3) Movement economy and (4) Psychic factors.

Pranayama: In simple terms pranayama may be called the control of the breath. Its essence lies in the modification of our normal process of breathing. Breathing is an act in which we take air from the atmosphere into our lungs, absorb the oxygen from it into our blood, and expel the air again into the atmosphere together with carbon dioxide and water vapors. This act of inhalation and exhalation is repeated every four to five seconds. Thus normally we breathe about fifteen times every minute. Every modification of this normal breathing process would not count as pranayama. Pranayama consists of modifications of the breathing process which we bring about deliberately and consciously. The process of breathing is modified in three different ways: (1) by inhaling and exhaling rapidly, taking shallow breaths, (2) By inhaling and exhaling slowly, taking long and deep breaths and (3) by stopping the act of breathing altogether. Many names are given to the variations to the breathing processes and are carried out along with two different endurance training methods for the development of endurance in kabaddi players.

"Games" is a ubiquitous display and a mass social development of contemporary times. In whatever time was spent authentic advancement brandishes has possessed an unmistakable place both in the ethical society of a social order. Its social essentialness presses on to fly. In the present day days 'wears for all' turn into an extremely prominent motto. Participation in games will yield best physical fitness and positive health for all. In the dash situation of

International Journal of Physical Education and Sports Sciences Vol. V, Issue No. I, April-2013, ISSN 2231-3745

cutting edge life individuals require more practice to keep their physique and mind fit to execute the regular exercises successfully. Were mortal is a dynamic animal. He controls limits for development. He has all the essential Neuro brawny systems that make development conceivable and energize terrible engine movement of the whole being. Without this support there is no life physiologically, while man is animated, he should move somehow. In the present day days, sports and amusement have got considerably more pertinence in the connection of men and ladies getting physical practice and along these lines keeping one self-fit and possessing the recreation time in a productive way. Therefore, it should be an endeavour for organizations in the social order to strive optimally to make accessible sufficient offices and sound programme of games and recreations at each start like schools and school, production lines and business strongholds, organizations and withdraws companies and orgs in country and urban zones. So individuals of all ages pick a few recreations or brandishes occasions for participant.

HISTORY AND DEVELOPMENT OF KABADDI

The sport has a long history dating back to pre-historic times. It was probably invented to ward off croup attacks by individuals and vice-versa. The game was very popular in the southern part of Asia played in its different forms under different names. A dramatized version of the great Indian epic, the "Mahabharata". has made an analogy of the game to a tight situation faced by Abhimaneu, the heir of ' the Pandava kings when he is surrounded on all sides by the enemy. Buddhist literature speaks of the Gautam Buddha playing Kabaddi for recreation. History also reveals that princes of yore played Kabaddi to display their strength and win their brides.

The game, known as Hu-Tu-Tu in Western India, Ha-Do-Do in Eastern India & Bangladesh, Chedugudu in Southern India and Kaunbada in Northern India, has undergone a sea chance through the ages. Modem Kabaddi is a synthesis of the game played in its various forms under different names.

Kabaddi attained national status in the year 1918. Maharashtra was the pioneer state to bring the game to the national platform and give it further popularity. Standard rules and regulations were formulated in 1918 but were brought out in print in the year 1923 and in this very year, an All India Tournament was organized at Baroda with these rules. Kabaddi has not looked back since then and numerous tournaments are organized all over the country throughout the year.

Kabaddi received its first international exposure during the 1936 Berlin Olympics, demonstrated by Hanuman Vyayam Prasarak Mandal, Amaravati, Maharashtra. The game was introduced in the Indian Olympics Games at Calcutta, in the year 1938. It was in 1950, that the All India Kabaddi Federation came into existence. Regular conduct of National level championship as per laid down rules and regulations began with effect from the year 1952. After the formation of the Amateur Kabaddi Federation of India, the first men's Nationals were held in Madras, while the women's Nationals were held in Calcutta in the year 1955.

Kabaddi was included in the curriculum of Regular Diploma courses in coaching conducted by the National Institute of Sports, the premier institute to develop sports in the country with effect from the year 1971. Thereafter, qualified coaches in Kabaddi are being produced every year. These qualified coaches are equipped to train players at different levels in a systematic manner with sports science back up.

Kabaddi was included as a demonstration in the IX as Asian Games hosted by India in the year 1982. In the year 1984 an open Inter-National tournament was organized at Bombay, in India. During the Tri-Centenary celebrations of the city of Calcutta, an Inter-National Invitation Kabaddi Tournament was organized in the city.

Kabaddi was being introduced to the African countries as a demonstration sport in the Afro Asian games, which was hosted by India. This is a feather in the cap for Kabaddi lovers and has been made possible thanks to the efforts of Mr. J. S. Ghelot, President, Amateur Kabaddi Federation of India and the Indian Olympic association.

LITERATURE REVIEW

The research scholar has made every possible effort to go through the literature related to the problems in the game of Kabaddi wherever available. The scholar has gleaned through almost every source like research quarterly, journal of various kinds, periodicals, encyclopedia, relevant books and eresources on Kabaddi to pick up the related materials. While going through the various sources of literature, it has been observed that very little work has been done on Kabaddi. However, the scholar has gone through the literature of allied studies that are related with other games and sports to collect the necessary information.

Stringer et al. (2007) Oxygen uptake (VO2) kinetics has been reported to be modified when lactic acid accumulates; however little attention has been given to the simultaneous carbon dioxide production (VCO2) kinetics. To demonstrate how VCO2 changes as a function of VO2 when lactic acid is buffered by bicarbonate, eight healthy subjects performed 6-min constant work rate cycle ergometer exercise tests at moderate, heavy and very heavy exercise intensities.

VCO2 and VO2 were measured breath-by-breath, and arterial blood samples were obtained every 7.5 s during the first 3 min of exercise, and were analyzed for pH, partial pressure of carbon dioxide, standard bicarbonate, and lactate. VCO2 abruptly increased relative to VO2 between 40 and 50 s after the start of exercise for the high exercise intensities. These gas exchange events were observed to correlate well with the time and VO2 at which lactic acid increased and plasma bicarbonate decreased (r = 0.90, r = 0.95, respectively). We conclude that bicarbonate buffering of lactic acid can be determined from the acceleration of VCO2 relative to VO2 kinetics in response to constant work rate exercise and the increase is quantitatively related to the magnitude of the lactic acid increase. This is easily visualized from a plot of VCO2 as a function of VO2.

Chow et al. (2007) The purpose of this study was to determine the effect of fitness and work level on the O2 uptake and CO2 output kinetics when the increase in work rate step is adjusted to the subject's maximum work capacity. Nine normal male subjects performed progressive incremental cycle ergometer exercise tests in 3-min steps to their maximum tolerance. The work rate step size was selected so that the symptomlimited maximum work rate would be reached in four steps at 12 min in all subjects. Oxygen consumption (VO2) and carbon dioxide production (VCO2) were calculated breath by breath. For the group, the time (mean, SEM) to reach 75% of the 3-min response (T0.75) for VO2 increased significantly (P less than 0.01) at progressively higher work rate steps, being 53.3 (5.5) s, 63.5 (4.6) s, 79.5 (5.0) s, and 94.5 (5.8) s, respectively. In contrast, T0.75 for VCO2 did not change significantly [74.9 (7.4) s, 75.6 (5.0) s, 85.1 (5.3) s, and 89.4 (6.3) s, respectively]. VCO2 kinetics were slower than VO2 kinetics at the low fractions of the subjects' work capacities but were the same or faster at the high fractions because of the slowing of VO2 kinetics. The first step showed the fastest rise in VO2. While VO2 kinetics slowed at each step, they were faster at each fraction of the work capacity in the fitter subjects. The step pattern in VO2 disappeared at high work rates for the less fit subjects.

Whipp et al. (2008) The pattern of lactate increase and its relation to Pyruvate and lactate-to-Pyruvate (L/P) ratio were studied during exercise and early recovery in 10 normal subjects for incremental exercise on a cycle ergometer. Gas exchange was measured breath by breath. Lactate and Pyruvate were measured by enzymatic techniques. Lactate and log lactate changed only slightly at low levels of O2 uptake (VO2) but both began to abruptly increase at approximately 40-55% of the maximal VO2. However, the point of abrupt increase in Pyruvate occurred at higher work rates and the rate of increase was not as great as that for lactate. Thus L/P ratio increased at the same VO2 as the log lactate increase. Following the exercise, Pyruvate continued to increase steeply for at least the first 5 recovery min, whereas at 2 min lactate increased only slightly or decreased. Thus arterial L/P ratio reversed its direction of change and decreased toward the resting value by 2 min of recovery. Lactate, as well as L/P ratios, decreased in all subjects by 5 min. This study demonstrates that lactate and Pyruvate concentrations increase slightly at low levels of exercise without a change in L/P ratio until a threshold work rate at which lactate abruptly increases without Pyruvate. The resulting increase in L/P ratio is progressive as work rate is incremented and abruptly reverses when exercise stops.

Reddy et al. (2009) The effect of pranayama a controlled breathing practice, on exercise tests was studied in athletes in two phases; sub-maximal and maximal exercise tests. At the end of phase I (one year) both the groups (control and experimental) achieved significantly higher work rate and reduction in oxygen consumption per unit work. There was a significant reduction in blood lactate and an increase in P/L ratio in the experimental group, at rest. At the end of phase II (two years), the oxygen consumption per unit work was found to be significantly reduced and the work rate significantly increased in the experimental group. Blood lactate decreased significantly at rest in the experimental group only. Pyruvate and Pyruvate-lactate ratio increased significantly in both the groups after exercise and at rest in the experimental group. The results in both phases showed that the subjects who practiced pranayama could achieve higher work rates with reduced oxygen consumption per unit work and without increase in blood lactate levels. The blood lactate levels were significantly low at rest.

Kumar et al. (2009) Twelve normal healthy volunteers (6 males and 6 females) undergoing yoga training for 90 days were studied for the effect of yoga on exercise tolerance. Their ages ranged from 18 to 28 years. The volunteers were taught only Pranayama for the first 20 days and later on yogic asanas were added. Sub-maximal exercise tolerance test was done on a motorized treadmill by using Balke's modified protocol, initially, after 20 days (Phase-I) and after 90 days of yoga training (Phase-II). Pyruvate and lactate in venous blood and blood gases in capillary blood were estimated immediately before and after the exercise. Minute ventilation and oxygen consumption were estimated before and during the test. Post exercise blood lactate was elevated significantly during initial and Phase-I, but not in Phase-II. There was significant reduction of minute ventilation and oxygen consumption only in males in Phase-I and II at the time when the volunteers reached their 80% of the predicted heart rate. Female volunteers were able to go to higher loads of exercise in Phase-I and II.

Uthirapathy and Chandrasekaran, (2010) conducted a study to find out the comparative effectiveness of yoga and aerobic exercises on basal level of cortisol.

International Journal of Physical Education and Sports Sciences Vol. V, Issue No. I, April-2013, ISSN 2231-3745

To assess the stress level the subjective inventory questionnaire was administered to four hundred and twenty players from Thiru. Vi. Ka Govt. Arts College, Thiruvarur Tamilnadu, India. Based on their score, fifty six players with perceived stress were identified. Of the fifty six, forty five subjects were randomly selected for this study. The subjects were divided equally into three groups namely control group, yoga group and aerobic exercises group. The yoga group and aerobic exercise, respectively. The experimental period was twelve weeks, six days a week and forty minutes per day.

The control group was not given any sort of special training. The criterion measure selected, for the study, was cortisol level and it was tested before and after the period of experiment. The initial and final scores, of all three groups, were obtained. To find out the significant mean differences, the analysis of co – variance was employed. Further, the scheffe"s post – hoc test was used to identify which group had shown better. The training effect of yogic practices and aerobic exercises evidences significance over the basal cortisol level.

Verma, et al. (2011) developed the physical profile of Kabaddi players. 100 male Kabaddi players were selected from West-Zone Inter-University championship as the subjects of the study. Their age ranged between 18 to 23 years. Keeping the feasibility in mind speed, agility & explosive power had been selected for this study. Speed & agility were assessed by administering 50 yard dash and the performance was recorded in seconds & shuttle run respectively. To determine for the explosive power, standing board jump was used and the reading was recorded in meters. To develop the physical profile of Kabaddi players, descriptive analysis was applied. The results of study indicates that in case of 50 yard dash, standing broad jump and shuttle run Kabaddi Players were having average in scores. In case of standing broad jump Kabaddi Players scored above average. It was concluded that West-Zone University Kabaddi players were average in speed and shuttle run and in case of standing broad jump were above the average.

Verma, et al. (2012) developed the physiological profiles of Kabaddi players. 100 male Kabaddi players were selected from West-Zone Inter-University Championship as the subjects of the study. Their age ranged from 18-23 years. Keeping the feasibility criterion in mind, resting heart rate, resting respiratory rate and vital capacity had been selected for this study. The resting heart rate, resting respiratory rate and vital capacity was measured with help of manual method- stop watch and dry spirometer. The data was analyzed by applying descriptive analysis. The result of study indicate that in case of resting heart rate and resting respiratory rate.

In case of vital capacity Kabaddi Players scored average vital capacity.

Samsudeen, (2013) investigated the effect of asanas, pranayama, meditation and game-specific training on selected physical fitness components and performance parameters among district level cricketers. Forty eight male college level cricketers were randomly selected from various affiliated clubs of Madurai district and their age ranged between 18 and 25 years. Initially the cricket playing ability of the subjects were subjectively rated by three qualified coaches. By using matching procedure on the basis of their Cricket playing ability the subject were classified into three matched groups, each having sixteen subjects. Group-I was involved in game-specific field training, Group-II was given game-specific field training combined with vogic practices and Group-III (Control) was not exposed to any specific training / conditioning. The game-specific field training schedule was specifically designed to improve the cricket playing ability and fitness levels of the cricketers. The game-specific training package designed by the investigator of the study was administered for a period of twelve weeks, five days in a week, with two sessions each day. Each session lasted two hours. The vogic practices were meted out for 45 minutes to group-II either before or after the game-specific field training. The yoga practice includes selected asana, pranayama and meditation technique. The motor components namely speed, explosive strength, endurance and flexibility were selected as variables for this investigation. Fifty meters run, standing broad jump, twelve minutes run and stand and reach tests were used to collect the physical fitness components of the subjects. Three qualified coaches subjectively rated the cricket playing ability of each player. The guideline for subjective rating was given by the investigator. The pre and post tests were conducted one day before and after the experimental treatment.

Analysis of covariance was used to analyze the collected data. Scheffe"s test was used as a post hoc test to determine which of the paired mean differ significantly. The results of the study reveal that both game-specific training and game-specific combined with yogic practice produced positive impacts on the motor components and performance parameters.

Parthiban, (2014) investigated to find out the Quantification of Physiological Responses to Yogic Practices and Weight Training among professional college men players. For this purpose, forty five men students studying undergraduate Engineering courses in the Government College of Engineering, Salem, Tamilnadu, India, during 2010-2011 were selected as subjects at random and they were divided randomly into three groups of fifteen each, Group I underwent yogic practices, group II underwent weight training and Group III acted as control group. The training period was limited to twelve weeks. The dependent variables selected for this study were resting pulse rate, respiratory rate and cardio respiratory endurance. All the subjects were tested prior to and immediately after the experimental period on resting pulse rate, respiratory rate, cardio respiratory endurance. The data obtained from the experimental groups before and after the experimental period were statistically analyzed with Analysis of covariance (ANCOVA). Whenever the "F" ratio was adjusted posttest means was found to be significant. The Scheffe's test was applied as post hoc test to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases. Resting pulse rate, respiratory rate and cardio respiratory endurance showed significant difference among the groups.

METHODOLOGY

Sample -

The samples of this study are randomly selected form the college in boys. The selected age groups of the subjects were from 18 to 25 years. In each group 15 subjects were selected. All the selected subjects were non-sportsman staying either in college hostels or at their residence to ensure the untrained development in endurance abilities. In all, 75 subjects were tested initially and the same 75 subjects were tested finally after every month for six months with training imparted on them. The tests were conducted for two days for four hours approximately on each group of 15 subjects. In all, 75 subjects were considered for obtaining the difference between the development of endurance through various methods supplemented with pranayama and without pranayama. Every subject was allotted with a code and a separate self-contained form for test results. The tests were selected in the aspects of development of endurance for volleyball. In growth height and weight is evaluated whereas in development of endurance abilities and their complex forms are considered for evaluation. The tests were administered individually under standard conditions applicable for specific tests and the time period required between two tests is amply considered.

Tools -

There are lot of endurance ability tests or means and tools. Lists of the items of several of the most used endurance tests, and indicates the types of items included in such tests: General Motor Ability test Batteries-

Barrow Motor Ability Test (men) - standing (1) long jump, softball throw for distance, zigzag run, wall pass using volleyball, six pound medicine ball put, 60 yard dash, (indoor battery).

- Cozens General Athletic Test (men) Baseball (2)throw for distance, football punt for distance, bar snap (parallel bars), standing long jump, dips (parallel bars), dodging run, and quartermile run.
- (3)Scott Motor Ability Test (women) - Volleyball throw for distance four-second dash, wall pass using volleyball, standing long jump, obstacle run.
- (4)Newton Motor Ability Test - standing long jump, hurdle run, scrambles (agility run).
- (5) Larson Motor Ability Test (men) - Indoor battery - Chins (pull-ups), vertical jump, dips, dodging run, and bar snap. Outdoor battery -Chins (pull-ups), bar snap, vertical jump, baseball throw for distance.
- (6)Latchaw Motor Achievement Test (elementary children) - vollevball wall pass. volleyball wall volley, vertical jump, standing long jump, shuttle run, soccer wall volley, softball repeated throws.

All these motor abilities test batteries deal with specific age, sex or category and the coefficients of the reliability and validity are not stable and vary in wide range of applied in the present study. These motor ability tests are useful to distinguish specific groups of students, and it is difficult to separate the individuals according to their categories.

Procedure-

Prana and Pranayama: Pranayama is an exact science. It is the fourth Anga or limb of Ashtanga Svasa Yoga. -Tasmin Sati prasvasayorgativicchedah Pranayamahll-Regulation of breath or the control of Prana is the stoppage of inhalation and exhalation, which follows after securing that steadiness of posture or seat, Asana.

"Svasa' means inspiratory breath and _Prasvasa' is expiratory breath. Breath is external manifestation of Prana, the vital force. Breath like electricity is gross Prana. Breath is Sthula, gross. Prana is Sukshma, subtle. By exercising control over this breathing you can control the subtle Prana inside. Control of Prana means control of mind. Mind cannot operate without the help of Prana. The vibrations of Prana only produce thoughts in the mind. It is Prana that moves the mind. It is Prana that sets the mind in motion. It is the Sukshma Prana or Psychic Prana that is intimately connected with the mind. This breath represents the important fly-wheel of an engine. Just as the other wheels stop when the driver stops the flywheel, so also other organs cease working, when the Yogi stops the breath. If you can control the fly-wheel, you can easily control the other wheels. Likewise, if you can control the external breath, you can easily

International Journal of Physical Education and Sports Sciences Vol. V, Issue No. I, April-2013, ISSN 2231-3745

control the inner vital force, Prana. The process, by which the Prana is controlled by regulation of external breath, is termed Pranayama.

Kapalabhati: Do Rechaka and Puraka rapidly like the bellows of a blacksmith. This destroys all the disorders of phlegm. Detailed instructions are given separately.

Madhya (Central) Nauli

Vama (Left) Nauli

Dakshina (Right) Nau

The Time: The practice of Pranayama should be commenced in Vasanta Ritu (spring) or Sarad Ritu (autumn) because in these seasons success is attained without any difficulty or troubles. The Vasanta is the period from March to April. The Sarad, autumn, lasts from September to October. In summer do not practise Pranayama, in the afternoon or evening. In the cool morning hours you can have your practice.

Control of Breath: The first important step is to master the Asana of posture or to control the body. The next exercise is Pranayama. Correct posture is indispensably requisite for the successful practice of Pranayama. An easy comfortable posture is Asana. That pose is the best which continues to be comfortable for the greatest length of time. Chest, neck, and head must be in one vertical line.

Collection of Data

The subjects were selected from the same college who are interested in kabaddi and involve themselves in training for the study. In all 7 testes were selected for evaluating the growth and development of endurance abilities of the subjects between 18 to 25 years. To have the difference of data for assessing the development it was decided to organize the test on 75 subjects; 15 in each group; 5 groups in all and the same subjects to be evaluated after a gap of every one month after imparting the training as scheduled.

Statistical Methods -

To analyze the collected data the scores are arranged according to the comparison and in sequential order so as to find out the statistical values. The following statistical variables are selected for comparing, analyzing and interpretation of numerical values and basing on which the findings are discussed.

CONCLUSION

Endurance is a very important ability in sports. Endurance is the product of all psychic and physical organs and systems. No other motor ability depends so much on the working capacity of complete psychophysical apparatus of humans as endurance. All other performance factors depend on one or more parts of this psycho-physical apparatus and as a result are directly or indirectly affected by endurance.

Growth and development in any creature on earth is inevitable and is a lifelong process. In this study specific qualities in endurance abilities are considered which are trained through pranayama to different groups along with the traditional endurance training methods as continuous training method and interval training method. The comparison is made to show that the development of endurance is seen better in the players whose training included pranayama along with the traditional endurance training methods and kabaddi.

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