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## **Anxiety In Relation To Competitive Performance Of Male Basketball Players**

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**Abstract:**The study was designed to examine the levels of trait anxiety that were experienced prior to S.A.I. All India Inter Regional basketball competition held at Sports Authority of India Training Centre, Digvijay Stadium Rajnandgaon (C.G.) during 2008-2009 and whether there were any differences between these environmental settings. Anxiety was measured using the Sport Competition Anxiety Test (SCAT) (Martens, 1987). The Sample size consisted of 72 basketball players adopted by Sports Authority of India, New Delhi with the age ranging from 14-21 ( $17.43 \pm 1.42$ ). Subjects were given the questionnaire SCAT, 1 hour prior to the start of competition. A within-subject, paired analysis failed to show any significance with somatic anxiety, cognitive anxiety and self confidence, between practice and competition. Analysis of trait anxiety showed significance ( $p > 0.05$ ) within subjects but failed to show significance when related to state anxiety. In conclusion, competition and practice variables failed to display any acknowledgeable, significance but possibly, by increasing sample size and period of testing, could change this result to support other study (Makay, Selig, Carlson & Morris, 1997). Once this is done, this knowledge can be applied to performance enhancement and game skills.

**INTRODUCTION:**Anxiety plays a paramount role in sport. It is the challenge in sports participation which produces anxiety. How an athlete handles the anxiety determines how successful he would be. Anxiety may be positive motivating force or it may interfere with successful performance in sport events. The degree of anxiety also varies with a number of different conditions. Anxiety is likely to be greater in higher competitive sports than in relatively non-competitive sports, because in the competitive sports, participants are expected to win and great demand are made upon them to succeed. The study of the effect of anxiety on sports performance has become a major topic of interest in sports psychologists, in recent years. The degree of perceived anxiety is an important variable to be considered in the performance of an individual. Agyajit Singh (1992), Modern perspectives of anxiety have ranged from the ideas of Freud, who defined anxiety as a response to perceived danger or stress, to contemporary attempts of psychologists to alter patterns of anxious behavior by Adjusting the chemistry of brain. It is from both personality, theorists and psychoanalysts that sport psychologists have obtained tools with which to carry out research and to help athletes adjust emotionally to stress imposed by competitive sport. Cognitively anxiety is a label given to feelings by the individual as the result of some event which may consists of an impending situation, an insult from another person, « physical treat by another and even thoughts about threatening situations and conditions. In the late 1960s, it was believed by the psychologists that anxiety was inborn trait and hence a personality factor. However, social psychologists did not agree with such an ascertain because they thought that the ways in which individuals feel and behave were in response so specific situations and reflected significant swings of mood. This is how the idea of state anxiety emerged. In the great version of anxiety test, questions about feelings are proceeded by directions to state "how I generally feel, (Speilberger,1970) and in the state measure the individual is asked to respond to items reflecting "how I feel right now." This way trait anxiety scores to be a part of man's personality make-up whereas the state anxiety is episode to the specific situations. The concept of sport competition anxiety cropped up just a decade ago.

Amu (2005) described that there was no gender difference in pre-competitive somatic anxiety among University Badminton Players, however, gender difference was found with male players experienced higher than female players in pre-competitive cognitive anxiety. Bridges & Knight (2005) told that there is actually a significant positive linear relationship between cognitive anxiety and performance for basketball players. Kais & Raudsepp (2005) demonstrated a moderate level of state anxiety and very high self-confidence of the players before the matches. Humara (1999) indicates that although anxiety has a considerable impact on performance, it is important to consider other components of an athlete's functioning as well. Bekiari et.al. (2006) described that male volleyball players rated somatic anxiety higher and were more affected by the verbal aggressiveness of their coaches than female volleyball players. Wilson & Raglin (2007) described that predicted and actual pre-competition anxiety values did not differ for either age or gender for the more important meets. The correlations between predicted and actual pre-competition anxiety occurred in all groups for both the less important and more important meets.

**METHODOLOGY**

**Selection of Subjects:**The present study was conducted on 72 Basketball players belonging to S. T. C established in Central Zone by S.A.I. New Delhi with the coloration of State Sports Department of India who have been selected from different Zone of the country with an idea to promote Basketball in India in future. They were undergoing a well planned training programme in different zone of India allocated by S.A.I. New Delhi. i.e. Central, North, A.B.S.C., South, East., in the different state of India. The age of the subjects ranged between 14 to 21, years. All of them were either school going students or college students and therefore, no difficulty was encountered in administering to the t psychological tests.

**Measure:**

**Sports Competition Anxiety Test:** The sport competition anxiety test is latest and most popular sport specific anxiety test whose purpose, as claimed by the authors is to assess individual differences in competitive trait anxiety or the tendency to purpose competition situations on threatening and/or to respond to these situations with elevated state anxiety.The Sport Competition Anxiety Tost (SCAT) by Marten (1987) contains 15 items .85 reliability.. Subjects are asked to indicate how they (generally feel when they compete in sports and games, and respond to each item using a three point ordinal scale (Hardly ever, Sometimes, or often). Ten of the items assess individual differences in competitive trait anxiety proneness, five spurious items are also included to reduce possible responses bias.

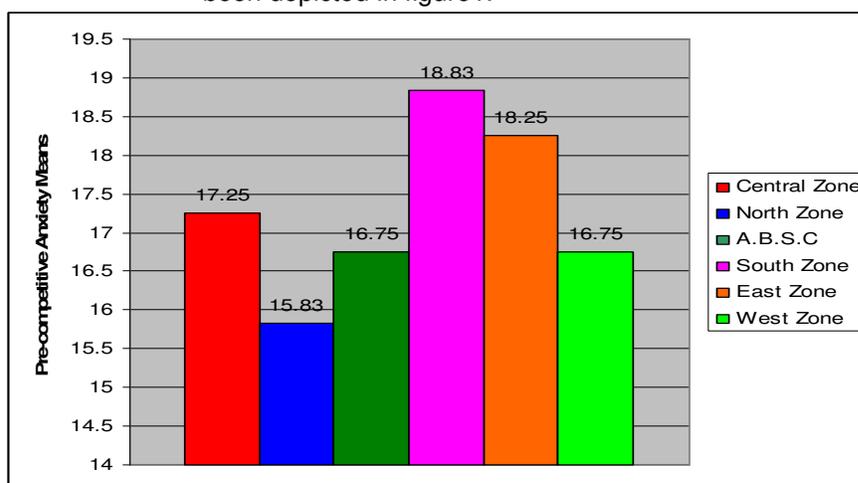
**RESULTS AND DISCUSSION**

To assess the pre-competition anxiety of male Basketball players of six zone teams, means and standard deviations, analysis of variance (ANOVA) and Pearson moment correlation coefficient (r) with competition performance were computed and data pertaining to this have been presented in table 1 to 3.

**TABLE 1: DESCRIPTIVE STATISTICS PRE-COMPETITIVE ANXIETY OF MALE BASKETBALL PLAYERS OF DIFFERENT ZONE OF S.A.I.**

S. No.	Zone	N	Means	SDs
1.	Central Zone	12	17.25	2.89
2.	North Zone	12	15.83	3.56
3.	Army Sports Boys Company	12	16.75	2.49
4.	South Zone	12	18.83	2.48
5.	East Zone	12	18.25	2.56
6.	West Zone	12	16.75	2.80

The mean scores on pre-competitive anxiety of male Basketball players at different zone of India have been depicted in figure1.



**Fig.1: Mean Scores of Pre-competitive Anxiety of Male Basketball Players of Different Zone of Sports Authority of India**

**TABLE 2: ANALYSIS OF VARIANCE OF PRE-COMPETITIVE ANXIETY OF MALE BASKETBALL PLAYERS OF DIFFERENT ZONE OF S. A. I.**

Source of Variance	df	Sum of Squares	Mean Square	F- Value
Between Groups	5	72.11	14.42	1.81
Within Groups	66	526.33	7.98	
Total	71	598.44		

Insignificant at .05 level,  
 $F_{.05}(5, 66) = 2.35$ .

From table 2, It is clearly evident that male Basketball players of different zone of Sports Authority of India did not differ significantly in their pre-competitive anxiety scores, as the obtained F-value of 1.81 was lesser than the required  $F_{.05}(5, 66) = 2.35$

**TABLE 3: RELATIONSHIP BETWEEN PRE-COMPETITIVE ANXIETY AND PERFORMANCE OF MALE BASKETBALL PLAYERS OF DIFFERENT ZONE OF S. A. I.**

Variables	Zones of Sports Authority of India					
	Central	North	ABSC	South	East	West
Anxiety V/S Performance	-0.247	0.366	-0.931	0.472	0.974*	0.745 *

\*Significant at .05 level,  $r_{.05}(14) = 0.497$ .

It is clear evident from Table 3 that the significant correlation existed between Anxiety V/S Performance Scores of East and West zone male basketball players, as the obtained Pearson's Product Moment Correlation Coefficients  $r$  of .974 and .745 respectively were higher than the required

$r_{.05(14)} = .497$ . But insignificant correlations existed among Central, North, ASBC and South zone male basketball players, as the obtained Pearson's Product Moment Correlation Coefficients  $r$  of  $-.247$ ,  $.366$ ,  $-.931$  and  $.472$  respectively were lesser than the required  $r_{.05(14)} = .497$ .

## DISCUSSION

Findings of descriptive data of male Basketball players of six zones allocated by Sports Authority of India on pre-competitive anxiety indicated that mean scores of central zone ( $17.25 \pm 2.89$ ), north zone ( $15.83 \pm 3.56$ ), ASBC ( $16.75 \pm 2.49$ ), south zone ( $18.83 \pm 2.48$ ), east zone ( $18.25 \pm 2.56$ ), and west zone ( $16.75 \pm 2.80$ ) clearly indicates quite low level of competition anxiety when compared to the percentile norms of SCAT-A ( $22.60 \pm 4.87$ ). This justifies that male Basketball players belong to different zones allocated by S.A. I. were quite relaxed prior to the competition. The results of one way analysis of variance (ANOVA) with male Basketball players belong to six zones allocated by S.A. I. showed insignificant differences in their pre-competitive anxiety. This may be attributed to the similarity in competitive experiences, coaching pattern and level of participation. When relationship between pre-competitive anxiety and performance scores exhibited by male Basketball players belong to six zones allocated by S.A. I. was established. This clearly indicated significant correlations between pre-competitive anxiety and performance scores of east and west zone male Basketball players. But male Basketball players of four zones i.e. central zone, north zone, ASBC and south zone expressed insignificant correlations between pre-competitive anxiety and performance scores. This justified that male Basketball players belong to different zones allocated by S.A. I. were quite relaxed prior to the competition and performed well in competition, but east and west zone male Basketball players were played under low stress, pressure, arousal and tension condition at the time competition. This may be attributed to the possible variations in their psychological preparation, competitive experience, coaching patterns and competitive orientation among six zone players.

## CONCLUSIONS

Within the limitations of the present study, the following conclusions are enumerated:

1. Male Basketball players of six different zones allocated by S.A. I. were found quite relaxed prior to the competition.
2. Male Basketball players belong to six zones allocated by S.A. I. did not differ significantly in their pre-competitive anxiety.
3. Significant correlations between pre-competitive anxiety and performance scores were found among East zone and West zone male Basketball players. But male Basketball players of four zones i.e. Central zone, North zone, ASBC and South zone expressed insignificant correlations between pre-competitive anxiety and performance scores.

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## Common Sports Injuries: Causes, Symptoms, Treatment And Prevention.

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### **ABSTRACT:**

The most common sports-related injuries primarily are overuse injuries. As the name implies, an overuse injury results from wear and tear on the body, particularly on joints subjected to repeated activity. By far, the most common sport that leads to injury is running. "Running jars the body from the foot all the way up into the back," says James Garrick, MD, Director of the Center for Sports Medicine at St. Francis Hospital in San Francisco. He has seen more runners than any other recreational athletes in his clinic, followed by those who participate in dance (including aerobics), tennis, skiing, basketball, gymnastics, football, soccer and figure skating. Participating in a variety of sports is fun and healthy for children and adults. However, it's critical that before you participate in any sport, you are aware of the precautions you can take to prevent injuries. Certain types of injuries plague sports participants. Most of them, however, are minor. Knowing the early signs and what to do can help prevent them from becoming nagging problems. The study gives a clear insight into the common sports injuries of an athlete with their causes, symptoms, treatment and its prevention

**Keywords:** *Sports Injuries, Symptoms, Causes, Treatment & Prevention*

**Introduction:** Participating in a variety of sports is fun and healthy for children and adults. However, it's critical that before you participate in any sport, you are aware of the precautions you can take to prevent injuries. Warming up, strengthening your muscles and cooling down after any type of exercise are excellent ways to help prevent sports injuries. Unfortunately, even when taking these and other precautions, injuries still occur. More than 10 million sports injuries are treated each year in the United States. Here is a list of some of the more common sports injuries with their causes, symptoms, treatments and Prevention

### **1. Sprains and Strains**

Sprains and strains are arguably the most common injuries caused by participating in sports. A sprain is a stretch or tear of a ligament, which is the connective tissue that joins bones together in your body. A strain is a stretch or tear of a muscle or tendon. Tendons connect your muscles to your bones.

**Causes:** Sprains and strains are caused by a fall or twist of the body. Any area of the body is susceptible to this type of injury, but depending on the particular sport, some areas are more at risk than others. For example, gymnasts and tennis players are more likely to suffer hand and elbow sprains and strains while basketball and soccer players are at greater risk for those of the leg and ankle. Ankle sprains are the most common & are generally caused by running on an uneven surface or landing off balance .

**Symptoms:** Sprains and strains may be evidenced by pain.

### **Treatment:**

The first step in treating a sprain or strain is with R.I.C.E (Rest, Ice, Compression, Elevation). Recovery time depends on your age, general health, and the severity of the sprain or strain. A more severe sprain or strain may require Physical therapy or surgery. Consult a medical professional for proper diagnosis and treatment.

## 2. Bursitis and Tendonitis

Bursitis is an inflammation of a bursa sac. Bursa sacs are located between bone and skin. They allow the skin to slide over bony prominences in the body, such as the knee, shoulder, and elbow. When a bursa sac becomes irritated and inflamed, it causes pain and discomfort in the nearby joints. Tendonitis is an inflammation or irritation of a tendon.

### Causes:

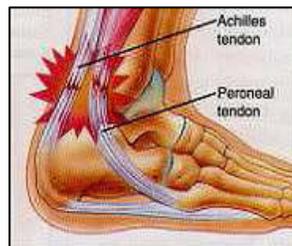
Bursitis and tendonitis can be caused by any activity that places extreme, prolonged, or repetitive stress on a bursa sac or tendon. Any bursa sac or tendon can become inflamed, but those found around the joints (shoulder, hip, knee, wrist, elbow, etc.) are the most commonly affected

### Symptoms:

Pain, discomfort, tenderness and possible swelling in the affected area.

### Treatment:

R.I.C.E (Rest, Ice, Compression, and Elevation) and anti-inflammatory medications are the first steps to decrease the inflammation and swelling. Gently stretch and massage the affected area. Consult a professional to learn the appropriate techniques. Keep pressure off of the affected area. If pain persists, consult a physician. In extreme cases of bursitis, a needle can be injected into the bursa sac by a doctor to remove the excess fluid and relieve the pain.



## 3. ACL Injury

The ACL (Anterior Cruciate Ligament) is one of the four major ligaments critical to the stability of the knee joint. Its primary purpose is to restrain forward motion of the shinbone.

An ACL injury occurs when this ligament is torn.

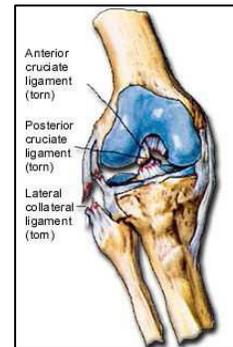
**Causes:** ACL tears are commonly caused by sports that require frequent pivots and stops and starts, such as football, basketball, skiing, and soccer. Patients with ACL tears generally complain of a sudden and quick injury with the knee "giving-out".

### Symptoms:

Pain, swelling, or a "popping" sound heard around the knee, and instability of the knee joint.

### Treatment:

Ice the knee to decrease inflammation and pain. Ice should be applied for at least 20 minutes, 2-3 times daily. Rest until the swelling disappears. Begin physical therapy to regain as much of the normal range of motion as possible. Surgery is often required to repair the damage.



**4. Shin Splints :** The periosteum is a membrane that surrounds bone. Shin Splints are an inflammation of the periosteum encasing the shinbone and are the result of strenuous athletic activity.

### Causes:

People who play sports that require a lot of running, repeated impact on hard surfaces, and lots of starts and stops are more prone to develop this condition. Common causes are training too rigorously, "overuse" of the lower leg muscles, and shoes without sufficient cushioning and inadequate rest time during training.

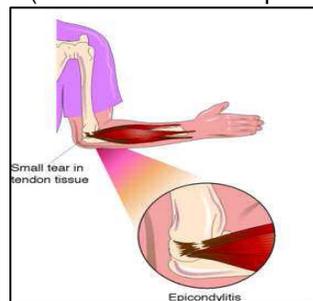
**Symptoms:** Pain, discomfort, inflammation, and swelling of the shin. Pain is usually

noticed at the very beginning of the exercise and afterwards while at rest.



**Treatment:** Avoid "overusing" leg muscles that are in pain. Ice the shin to decrease inflammation and pain. Ice should be applied for at least 20 minutes, 2-3 times daily. Gently stretch and massage the affected area. Consult a professional to learn the appropriate techniques. If pain persists

**Tennis Elbow :**Tennis Elbow (also called lateral epicondylitis) is an inflammation of the tendons..



**Causes:** The most common cause of tennis elbow is "overuse" of arm and forearm muscles. People who play sports that require them to frequently use their forearm, such as tennis and golf, are more prone to develop this condition.

**Symptoms:** Pain and discomfort around the bony prominence of the elbow, possibly travelling to the forearm and hand. Pain usually occurs when moving the arm or grasping or squeezing something.

**Treatment:** Avoid doing any activity that causes pain and discomfort. Modify movements to avoid discomfort. Wearing an elbow splint may help to reduce pain and allow the muscles and tendons to rest and heal. Ice the elbow to decrease inflammation and pain. Ice should be applied for at least 20 minutes, 2-3 times daily. Anti-inflammatory medications can also be taken to decrease inflammation and pain. Gently stretch and strengthen the muscles and tendons around the elbow, forearm, and wrist.

#### **Sports Injury Prevention:**

Participating in regular physical activities such as sports is a key component of a healthy lifestyle. Current research indicates that exercise and involvement in sports can help you lose weight, stay healthy and even improve your mental state. However, participation in any sport or physical activity also carries the potential for injury in children and adults. Before you or your children participate in any exercise or sport, make sure you take the necessary precautions to prevent injuries. Here are some easy steps you can take to prevent the most common injuries:

#### **Warming-Up :**

It is important that you do some type of aerobic exercise prior to participating in your sport of choice. A proper warm-up will increase the flow of blood and oxygen to your muscles, which heats the muscle tissue. Warm muscles are less prone to become strained and irritated.

#### **Cooling Down :**

After you have participated in your sport, you should stretch the muscles that you just worked. Muscles have a tendency to tighten during aerobic exercise, so stretching after you have exercised will leave your muscles more flexible and limber and less prone to injury.

#### **Conclusion:**

This article is intended for your information and education. We are not experts in the diagnosis and treatment of specific medical or mental problems. When dealing with a severe problem, please consult with a healthcare or mental health professional and research the alternatives available for your particular diagnosis prior to embarking on causes, treatment & prevention plan.

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## Value Education Through Moral Education In School Curriculum

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### INTRODUCTION

Education is a process of bringing about 'desirable' changes in the way of one thinks, feels, and acts in accordance with one's concept of the good life. According to this, education needs transmission of values i.e., Values are integral to the process of education. To make 'desirable' changes in younger minds, we need to have design a curriculum, a planned collection of 'desirable' knowledge, skills, attitudes and values that we wish to pass to the younger generation. So it is necessary to include the moral education in school curriculum to inculcation of values in school children. The school curriculum includes moral education along with other subjects like maths, science, languages and social studies. Values can be acquired also through situations apart from teaching-learning process. One may forget facts learned and skills picked up by him in a subject. But if a student has acquired any value from it, it will remain with him over a long time, even up to the end of his life.

**VALUE EDUCATION** According to educational dictionary, Value Education means, "important attribute for psychological, social and moral considerations, in general, it is behavior and work instructors" (Carter, 1979). Value Education is education in values and education towards the inculcation of values. Keeping in view the requirements of providing facilities for all-round development of the child, the students should imbibe the following values and the school should provide the necessary activities and programmes to inculcate them:

**1. Aesthetic values:** Love for the fine art, dancing, painting and music as well as for the symmetry and beauty in nature, rhyme and rhythm in poetry etc.

**2. Spiritual values:** Importance given to the soul or the spirit etc. through yoga and meditation.

**3. Moral or ethical values:** Values related to the code of conduct, honesty, integrity, discipline, self-control, self-reliance, inquiry into the good, the bad and the ugly aspects of human behavior, code of conduct based on logical reasoning.

**4. Social values:** Concerning the responsibilities and the contribution of the individual towards the society and its wellbeing. These are governed by the political and social philosophy and the Constitution of the country, freedom, socialism, secularism, democracy, national integration, international understanding, democratic citizenship, equality, social justice, peace, inner harmony, fellow feeling, unity in the midst of diversities, civic sense, responsibility of citizens, camaraderie and cooperation, participation in community activities etc.

**MORAL EDUCATION:** Moral values are a group of psychological arrangements acquired by the individual in living in a social sphere. Morals as socio-legal-religious norms are supposed to help people behave responsibly. However not all morals lead to responsible behavior. Values education can show which morals are "bad" morals and which are "good". The change in behavior comes from wrestling with questions about right and wrong. American psychologist Lawrence Kohlberg who specialized in research on moral education and reasoning, and was best known for his theory of stages of moral development, believed children needed to be in an environment that allowed for open and public discussion of day-to-day conflicts and problems to develop their moral reasoning ability. Kohlberg's six stages can be more generally grouped into three levels of two stages each: pre-conventional, conventional and post-conventional. Stages cannot be skipped; each provides a new and necessary perspective, more comprehensive and differentiated than its predecessors but integrated with them.

Level 1 (Pre-Conventional)

1. Obedience and punishment orientation
2. Self-interest orientation

Level 2 (Conventional)

3. Interpersonal accord and conformity
4. Authority and social order maintaining orientation

Level 3 (Post-Conventional)

5. Social contract orientation
6. Universal ethical principles.

### **MORAL EDUCATION IN SCHOOL CURRICULUM**

Value education is an umbrella of concepts that includes moral education and citizenship education. If moral education is included as a part of school curriculum to development of the learners personality by considering the process of education itself i.e., its aims, curriculum and methods. Inclusion of universally accepted moral values in school curriculum helps the students in guiding towards right path. The moral values to be included in school curriculum are compassion, courtesy, equality, generosity, honesty, hospitality, integrity, kindness, meekness, mercy, moderation, modesty, patience, prayer, self-expression, selflessness, service, sympathy and thankfulness etc.,

It is useful to the teachers to make them trained in teaching moral values along with other subjects taught in school. It is the responsibility of the teacher to make them aware of the understanding of school subjects along with value education.

The main objectives of inclusion of moral education in school curriculum should be:

- To build a sense of character formation through value consciousness and moral integrity.
- To build spiritual development, self knowledge, self esteem and self confidence, courage.
- To make students understand that the holistic development of an individual is attained through pursuit of excellence, moral uprightness, love of fellow beings.

### **CONCLUSION**

There are so many ways in which the value education can be included in school curriculum as a means inclusion of moral education. No doubt, many schools may have different approaches in teaching moral values to their students along with regular curriculum. The moral values can be taught by way of comics and storytelling, conducting personality development programs, essay writing and elocution competitions, discussions and brainstorming, activity etc., Empowering the students in value based education is not an event, it is a process....a continuous process, and the journey must continue...

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## Walking: The winning Exercise

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**Abstract:** The environment plays a part too; inactivity has been engineered into our lives, from escalators to remote controls to riding lawn mowers to robotic vacuum cleaners to electric toothbrushes to the disappearance of sidewalks and safe places to walk. But research shows that all this automation is bad for our health. Inactivity is the second leading preventable cause of death in the world, second only to tobacco use. You'd think a simple activity like walking would be just that, simple. But fewer than 50% of adults do enough exercise to gain any health or fitness benefits from physical activity. Is walking our salvation? I don't know for sure, but evidence suggests that it's probably a good start.

Keywords: Physical activity, Exercise, walking, warm up/down, fitness.

**Introduction:** Walking is the winning exercise. If you are looking for a fitness activity capable of improving you in a virtual way, walking is it. That might seem a pretty tall claim for an exercise as easy as walking fills the bill. Research shows that the ease of walking is the secret to its advantages. Experts also agree that all you need is 30 minutes of moderate-level physical activity on most days of the week to see health benefits and the best would be walking.

Making the following practices a part of your walking exercise will probably cut your risk of injury.

- Warming up thoroughly and Stretch thoroughly.
- Condition the body for better strength and endurance.
- Cool down thoroughly.
- Learn more about your walking routine and your body and how they affect each other.
- Use good walking shoes and equipment

### **Most important principles of safe walking:**

**Warming Up:** Exercising at a lower intensity in order to get the blood circulating, and let your body know that you are preparing for exercise. A good warm up, one that lasts at least 10 minutes before brisk walking does help prevent injuries. As you progress through your walking program you will need to warm up longer on days you will do your fast workouts.

- Warming up increases blood flow to your joints and helps increase fluidity movement, which protects against injury and also guards against muscle injuries
- When blood is pumped into muscle they can contract more forcefully and efficiently Warming up allows your muscles, joints through the full range of motion.

**Stretching:** After a warm up is safer and easier because warm up exercise raises the temperature inside your muscles which in turn makes them more elastic- easier to stretch and harder to injure.

**Cooling down:** At the end of your walk you need to walk at a slower pace to cool down. The harder you have worked out the longer you should cool down.

Walking can benefit all these important areas

**The Head:** Research proves that a regular walking. It stimulates thought by increasing the brain's supply of

oxygen and Boost spirits through the release of natural, mood elevating brain chemicals called endorphins.

**The Lungs:** Walking pumps up the lung power. Studies show that regular walking program

- Can increase the ability of the cardio respiratory system to use oxygen.
- Strengthens the muscles of diaphragm and reduces the symptoms of chronic emphysema and bronchitis. Also reduces the desire to smoke.

**The Back:** Many runners suffer from low back pain because of the stress to spinal disks created by running's pounding. Walking, however,

- Puts no more stress on spinal disks than standing
- Help relieve back pain by strengthening and toning muscles that make the spine more stable.

**The Bones:** Bones need exercise too. They respond to weight bearing exercises by taking on more calcium and becoming more resistant to osteoporosis a weakening of the bones associated with aging.

**The Feet:** Walking makes the subject's feet to forces no more than standing. It

- Strengthens the muscles and tendons in the feet, so they may hurt less often.
- Reduces risk of stroke by keeping the blood flowing freely .
- Forestalls senility by keeping blood vessels in the brain free of blood blocking plaque
- Reduces the discomforts of head by increasing circulation to both brain and scalp.

**The Heart:** Walking benefits heart by

- Lowering resting pulse and Reducing blood pressure.
- Decreasing levels of artery clogging blood facts
- Encouraging the development of 'safety valve' blood vessels capable of redirecting blood flow should a heart attack occur.

**The Stomach**

- Step up the body's metabolism in a way that burns calories even during rest.
- Curb appetite and reduce a number of calories absorbed from a meal by as much as 5 to 10 percent, if done within 30 minutes of that meal's completion.

**The Legs:** Walking can Slim down heavy legs and build up slim legs and discourages the onset of varicose veins

**Conclusion** Walking's great attraction is that we all know perfectly well how to do it. Because it is a low impact exercise, it is good choice for anyone who is overweight and under exercised. It won't unduly stress your joints or ligaments, but it will strengthen your heart and lungs, tone your calf and thigh muscles and burn plenty of calories. A nice, leisure stroll, in which you cover a mile in an hour, burns about 100 calories per mile. Speeding things up a little to 2 miles per hour will help you burn 200 calories, while brisk walk 3 and half miles per hour burns 330 calories an hour approximately. Another nice thing about walking is that you can begin your new walking program right now. The sport requires no advanced instruction and a little equipment, beyond willing legs and a pair of sturdy shoes. Walking has two other advantages: It can be done anywhere, under any conditions, and it is very social sport. Simply grab a few friends and turn your daily coffee and doughnut break into on the road conversation time.

## **“Stress and Mental Health of Athlete; A Correlation Study**

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**Introduction:** Athletes experience unique stressors related to their athletic status such as extensive time demands; a loss of the 'star status' that many had experienced as high school athletes; injuries; the possibility of being benched/red-shirted their freshman year and conflicts with their coaches, among other factors (Humphrey, Yow, & Bowden, 2000; Papanikolaou et al., 2003). In addition to these stresses, freshmen athletes must also meet the increased academic demands at the college level. The interaction of these multiple stressors presents a unique problem for the college student athlete, and evidence suggests that the combination of these stressors has a negative affect on their well-being. For example, a recent investigation found that almost half of the male athletes and slightly more than half of the female athletes interviewed indicated that stresses associated with sport participation, such as pressure to win, excessive anxiety, frustration conflict, irritation and fear significantly affected their mental or emotional health (Humphrey et al., 2000). Moreover, studies have suggested that college athletes who experience high levels of stress are more likely to practice bad health habits (Hudd et al., 2000) and to experience psychological problems (Shirka, 1997), including low self-esteem (Hudd et al., 2000; Papanikolaou et al., 2003). In addition to mental health concerns, many athletes report physical health concerns as well, such as lack of sleep, continuous tension, fatigue, headaches, and digestive problems (Humphrey et al., 2000). In fact, 10% of college athletes suffer from psychological and physiological problems that are severe enough to require counseling intervention (Hinkle, 1994). Even more alarming is the fact that college student athletes tend to avoid seeking out available counseling (Murray, 1997), so the percentage of student athletes who may actually require such intervention is possibly higher than this figure. This is important since Murray (1997) has learned that in addition to those psychological and physiological issues mentioned above, athletes may also be in particular need of counseling for a variety of additional stress-related concerns, including time management, burnout, fear of failure, anxiety, depression, and self-esteem issues. Recent research has supported the contention that time in particular is an important obstacle for many athletes. Humphrey et al. (2000) report that for more than 40 percent of male athletes and well over half for the female athletes, factors related to "time" were the most serious causes of stress. Most of the respondents in this study felt that there was simply not enough time to combine academics and athletics and to do their best in both areas (Humphrey et al., 2000).

### **Method:**

#### **Aim and Objective of the study:**

1. To Search the Correlation between Stress and mental health of athletes.

#### **Hypothesis:**

1. Low stress athletes have significantly good mental health than high stress athletes.
2. Positive correlation in between stress and mental health of athletes.

**Sample :** For the present study 200 sample were selected from jalna city, Maharashtra State. The effective sample consisted of 200 only athletes. The age range of subjects was 18 to 25 years.

## Tools

**Singh Personal Stress Source Inventory (SPSSI):** This test is developed and standardized by Arun Kumar Singh. The test consisted of 35 Items. The subjects were required to respond to each item in terms of 'Seldom', sometimes, and frequently. Internal Consistency Reliability by odd – even method was found to be .784 which was highly significant.

**C.G.Deshpande Mental Health test:** C.G.Deshpande Mental Health test was used for measuring mental health. All the 50 items of the scale are presented in simple and brisk style. Each of the item has two answer (multiple Choice) 'YES' and 'NO' This is well known test having high reliability and validity coefficients.

## Procedures of data collection

Each of the two instruments could be administered individuals as well as a small group. While collecting the data for the study the later approaches was adopted. The subjects were called in a small group of 20 to 25 subjects and their seating arrangements was made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedure suggested by the author of the tests. The tests were administered and a field copy of each test was collected.

**Variable:Independent variable-** Athletes

**Dependent Variable** 1. Stress 2. Mental Health

## Statistical Treatment of Data

### Stress and mental health of athletes of Mean, S.D. and 't' Values

Group	Mean	S.D	N	df	"t"	r
Stress	61.09	11.23	100	198	7.17**	0.72
Mental Health	49.85	10.92	100			

The results related to the hypothesis have been recorded. Mean of Stress score of the athletes is 61.09 and mental health that of the athletes 49.85 The difference between the two mean is highly significant  $t=7.17$ ,  $df=198$ . And stress and mental health highly Pearson correlation = 0.47

Thus the hypothesis is confirmed low Stress athletes have significantly good mental health than high Stress athletes. And Support the Hypothesis.

**Results:1.** Low stress athletes have significantly good mental health than high stress athletes.

2.Positive correlation in between stress and mental health of athletes.

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## Effect of Selected Asanas on lower Back pain - Inter collegiate level cricket players

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**Abstract:** The purpose of the study was to find out the effect of selected asana practices on lower back pain of cricketers. To achieve the purpose 30 Cricketers with lower back pain were selected from Dharwad City. Ages of the selected subjects were ranged between 21-28 years. They were divided in to two equal groups based on the pain scores. Pre test and post test were collected for both the control and experimental groups. Pain level was measured by a ten point scale Visual Analog Scale (VAS) as suggested by Huskisson. The experimental group was exposed to 10 weeks (4Days per week) of Asana practices where as control group was not exposed to any experimental treatment. The result of the study showed that there was a significant decrease in the back pain due to selected asana practices.

### Introduction

Lower back pain is particularly common in younger Cricketers especially bowlers. Previous research has reported that these injuries occur in up to 65% of cricket players. Fast bowlers are at particular risk of lower back pain and injuries compared to spin bowlers, batsmen and wicket keepers. Concomitant hyperextension of lumbar spine and rotation of the thoracic spine in fast bowling places a significant amount of stress on the lumbar spine. This causes injuries to the bones, joints, ligaments and muscles in and around the lumbar spine with resultant back pain. Pain is gradual in onset and is characteristically described as the 'crescendo – type' of pain, occurring at the end of day's play initially, then earlier the next time around and so on. Typically, it is sore when the player bends backwards especially if standing on one leg.

The reason for such a high incidence of back injury has been attributed to a combination of factors. These include inadequate physical and physiological preparation, relatively reduced bone density following a 'growth spurt', postural defects, biomechanical aspects of the bowling technique, rapid escalation in training frequency, duration of bowling spells in matches, and the repetitive nature of movements.

**Batsmen-** remaining at the crease for extended periods can cause shortened flexor muscles at the front of the spine, leading to chronic back pain.

**Fast Bowler-** normally cricketers' feet and ankles are placed under enormous stress while releasing the ball, and exerting enormous body force to control the follow through.

**Spin Bowler-** stress placed on the wrist, fingers, elbows and shoulders can result in arthritic pain, particularly during cold weather

**Wicket Keeper-** without the proper conditioning exercises, this player is prone to stretched ligaments that can cause balance instability.

### Common Causes of Back Pain

1. Incorrect posture- Proper Posture to prevent back pain.
2. Improper movements or bad body mechanics.
3. Repetitive motion on joints or muscles.
4. Disc injury can be the cause of prolonged back pain but muscles and ligaments may also be damaged or inflamed. Bulging Discs.
5. The sacroiliac joint can create pain when it does not sit in its housing correctly

Muscle strains and muscle imbalances are often identified as the cause of back pain. Pain from an injury can often remain long after the initial action because of the muscle imbalances. The muscles are forced to work in different, unnatural ways as the individual tries to avoid the pain in the problem area. This causes mechanical problems with the skeleton, building pressure at points on the spine-and pain. Meniscoid occlusion also causes acute lower back pain, when, more mobile regions of the spine become pinched or trapped. What results can be sudden and severe pain. Symptoms include severe lower back pain, also accompanied sometimes by muscle spasms, pain with walking or pain concentrated to a single side of the body.

There are also many non-anatomical causes that can contribute to back pain. These can include, but are not limited to, repressed anger, stress or depression. Even if an anatomical cause is determined for the back pain, if stress or depression is present, it should be treated additionally. Back pain is also frequently experienced with no underlying anatomical problem.

Stress fracture of the lumbar spine is a common injury in young fast bowling in cricket requires a combination of spinal hyperextension (bending back) together with rotation and side flexion of the trunk. This puts a lot of stress on an area of the vertebra called the 'Pars Interarticularis' and this is where stress fractures develop. Lower back stress fractures are usually characterized by an ache in the lower back which is exacerbated by sporting activities and eased by rest.

The principals behind the exercises is that if certain specific muscles can be recruited or contracted, the spine will have much better support. This prevents postural faults which can predispose a person to back pain. In order to understand how these exercises are effective, it is necessary have a brief introduction to how the back is supported by muscles. The first muscle we are concerned with is called Transversus. This muscle arises from the middle of the tummy and goes right around the midriff, attaching itself to the spine. The Transversus muscle acts as a natural corset and provides stability for the lower back. The second muscle involved in this exercise programme is the Multifidus. This muscle lies deep in the spine and attaches in between each vertebra. When it contracts it increases the stability of the spinal column. If you can contract the Transversus muscle, the Multifidus muscle is also contracted automatically. This improves spinal stability and can relieve back pain

- **Neck Pain**-Caused by injury to the muscles,tendons and ligaments around the neck area. Disc problems are also common.
- **Shoulder Pain**-Shoulder pain is more often related to muscle and ligament damage and disc injury is less common.
- **Upper Back Pain**-Usually related to muscle and ligament imbalance or injury. Poor posture is also a common cause exercises show strengthening and stretches.
- **Lower Back Pain**-Muscle strain or disc injury causes a great majority of low back pain. The lower back is an area that is quite often injured in individuals.
- **Sacrum Sacroiliac Joint**-The Sacrum is commonly aggravated and can cause Sciatica (Painful Back) down the legs.

#### **The goals for treating back pain are:**

- To quickly achieve maximum reduction in pain intensity
- Restore individual's ability to function in everyday activities

#### **Purpose of the study**

The purpose of the study was to find out the effect of selected asana practices on lower back pain of cricketers.

## Methodology

To achieve the purpose 30 Cricketers with lower back pain were selected from Chennai City colleges with advice of medical practitioner. Ages of the selected subjects were ranged between 21-28 years. They were divided in to two equal groups based on the pain scores. Pre test and post test were collected for both the control and experimental groups. Pain level was measured by a ten point scale Visual Analog Scale (VAS) as suggested by Huskisson EC). The experimental group was exposed to 10 weeks (4Days per week)) of Asana practices where as control group was not exposed to any experimental treatment.

The following Asanas were adopted in the study

1. Padmasana 2. Bhujangasana 3. Pachimottasana
4. Gomukasana 5. Virksasana 6. Ustrasana
7. Supta padangusthasana against wall 8. Bharadwajasana
9. shalabhasana 10. Shavasana

The collected data were analyzed using dependent test

## Results and Discussions

### Paired Samples Statistics

From table

Sl.No	Group/Test	mean	N	Std.Dev	Std.Error mean	R	T	df	Sig
Pair 1	CGPRE	5.07	15	.70	.18	.18	1.47	14	.164
	CGPOST	5.20	15	.68	.17				
Pair 2	EGPRE	5.00	15	.76	.19	.66	7.64	14	.000
	EGPOST	3.53	15	.99	.25				

the it

could be inferred that there was significant difference in the pre test and post test on low back pain, as the obtained probability value was less than the 0.05 among the experimental group. This would clearly indicate that due to the experiment, the subjects in the experimental group decreased their level of low back pain. There is no significant reduction in the back pain among the control group as the obtained probability value was higher than the 0.05

### Conclusions:

Within the limitations of this study it was concluded that there was significant decrease in the back pain among inter collegiate level cricket players due to selected asana practices.

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## Proprioceptive Neuromuscular Facilitation Stretching Effect On Muscular Strength And Flexibility Of College Students

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### Abstract

The purpose of the study was to investigate the effect of proprioceptive neuromuscular facilitation stretching on muscular strength and flexibility of non athletic college students. Hundred non-athletic students from different colleges in North 24 Parganas District of West Bengal were taken for this study, of which fifty were male and another fifty were female whose age ranged from 18.5 to 20.6 years. The Sergeant vertical jump test and Sit and Reach test were conducted to measure muscular strength and flexibility. The proprioceptive neuromuscular facilitation stretching programme were conducted for a period of ten weeks for three alternative days in a week for 20 minutes session separately for male and female in the month of July to September. Paired 't' test was applied to investigate the existence of significant difference of proprioceptive neuromuscular facilitation stretching programme using SPSS Software. The level of significance was set at 0.05 level of confidence. It was concluded that significant difference was observed between pre-test and post-test on Sergeant Vertical Jump test and Sit and Reach test for male as well as female non athletic college students respectively.

**Key words:** Sergeant Vertical Jump test, Sit and Reach test

### Introduction

The ability of an individual to move smoothly depends on his flexibility, an attribute that enhances both safety and optimal physical activities. The hamstrings are example of muscle groups that have a tendency to shorten (Turner et.al 1988, pp. 314-320). According to (Zachezewski1989, pp. 698-699) Flexibility of muscle is "the ability of a muscle to lengthen, allowing one joint (or more than one joint in a series) to move through a range of motion." Good muscle flexibility will allow muscle tissue to accommodate to imposed Stress more easily and allow efficient and effective movement. More efficiency and effectiveness in movement as a result of enhanced muscle flexibility will assist in preventing or minimizing injuries and may enhance performance (Zachezewski1989, pp.698-699, Agre 1985, pp. 1-33, Anderson and Burke 1991, pp. 63-86, Ciullo and Zarins 1983, pp. 71-86, Johnagen and Griksson 1994, pp. 262-266, Worrell et.al 1991, pp.178-125, Worrell 1994, pp. 154-159). Hamstring injuries are one of the most common musculotendinous injuries in the lower extremity. They occur primarily during high-speed or high intensity exercises and have a high rate of recurrence (Agre 1985, pp. 1-33, Garrett et. al 1984, pp. 98-103). Reported factors that contribute to hamstring injuries include the lack of muscle extensibility (Agre 1985, pp. 1-33, Worrell et.al 1991, pp.118-125), improper warm up (Worrell et.al 1991, pp.118-125), fatigue (Worrell et.al 1991, pp.118-125), disproportional quadriceps to hamstring strength (Worrell 1992 pp. 12-17) and poor body mechanics during running (Agre 1985, pp. 1-33). (Worrel 1992, pp. 12-17) stated that a "lack of hamstring flexibility was the single most important characteristic of hamstring injuries in athletes." A tight hamstring causes increased patellofemoral compressive force, which may eventually lead to patellofemoral Syndrome. Flexibility can be enhanced by simple, non-surgical procedures like stretching the shortened muscles. Stretching techniques such as cyclic stretching (Turner et.al 1988, pp. 314-320), Isometric exercise (Medeiros et. al 1977, pp. 518-522), proprioceptive neuromuscular facilitation Protocol and static stretching (Worrell 1994, pp.154-159) have been used to enhance muscular flexibility. Stretching is important in developing and maintaining the muscle's strength, pliability and length. When a muscle shortens, the ability to perform a task involving that muscle decreases which can increase the risk if injury. Maintaining the muscle's proper strength, pliability and length allows the body to maintain the proper biomechanical position, and decreases the possibility for injury. Therefore it will be worthwhile to investigate the effect of proprioceptive neuromuscular facilitation stretching on muscular strength and flexibility of non athletic college students who may be selected at an early age and might be systematically nurtured for full manifestation of sports potentialities through scientific sports training for enhancing performance and upliftment of overall fitness .

## Method and Materials

Hundred non-athletic students from different colleges in North 24 Parganas District of West Bengal were taken for this study, of which fifty were male and another fifty were female whose age ranged from 18.5 to 20.6 years. The Sergeant vertical jump test and Sit and Reach test were conducted to measure muscular strength and flexibility respectively at the gymnasium of Post Graduate Government Institute for Physical Education, Banipur, North 24 Parganas, West Bengal. The proprioceptive neuromuscular facilitation stretching programme were conducted for a period of ten weeks for three alternative days in a week for 20 minutes session separately for male and female in the month of July to September. The subjects were assembled in the Indoor Cricket cum Multipurpose Hall of the above said institute for experimental training. Proper warm up was administered before training. The data gathered were duly analysed through statistical procedure. Paired 't' test was applied to investigate the existence of significant difference of proprioceptive neuromuscular facilitation stretching programme using SPSS Software. The level of significance was set at 0.05 level of confidence. Prior to the proprioceptive neuromuscular facilitation stretching programme, a pre test was taken and immediate after the completion of the training programme, the post test was held. Before the training, subjects were asked to do proper warm up. Following exercises was included in the proprioceptive neuromuscular facilitation stretching programme namely:

Lying Glute	Lying Hamstring
Seated Glute	Seated Hamstring
Lying Piriformis	Lying (Prone) Quadriceps
Seated Piriformis	Lying Bent Leg Groin
Lying Crossover	Lying Straight Leg Groin

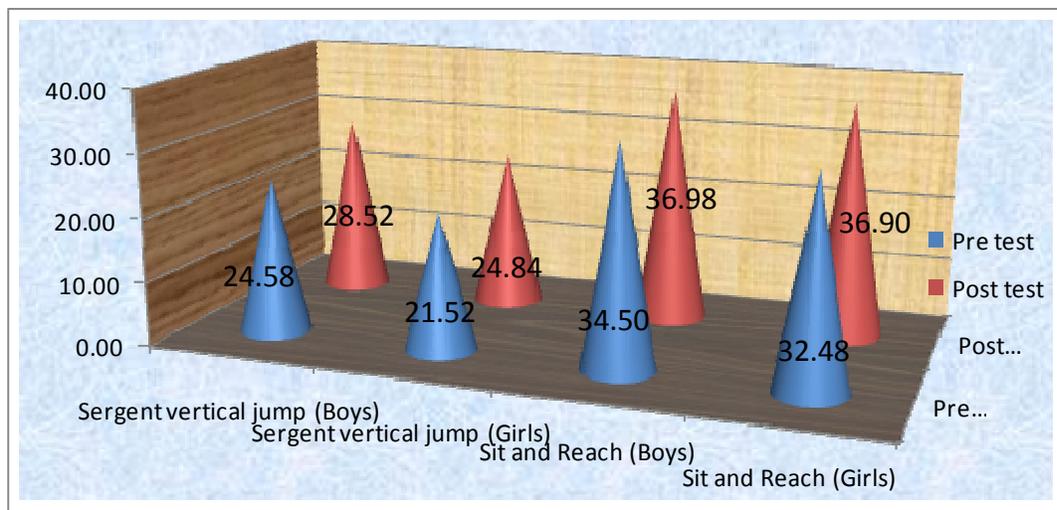
## Findings

Table – 1  
SIGNIFICANCE OF DIFFERENCE OF MEANS AND STANDARD DEVIATIONS OF COLLEGE STUDENT IN SERGENT VERTICAL JUMP TEST AND SIT AND REACH TEST

Groups	Mean	S.D.	Mean Diff.	S.E.	't' ratio
Sergent Vertical Jump for Boys (pre)	24.58	4.066	3.940	0.361	10.922*
Sergent Vertical Jump for Boys (post)	28.52	3.699			
Sergent Vertical Jump for Girls (pre)	21.52	2.573	3.320	0.248	13.378*
Sergent Vertical Jump for Girls (post)	24.84	2.298			
Sit and Reach for Boys (pre)	34.50	3.309	2.480	0.336	7.382*
Sit and Reach for Boys (post)	36.98	2.707			
Sit and Reach for Girls (pre)	32.48	2.787	4.42	0.347	12.756*
Sit and Reach for Girls (post)	36.90	2.206			

\* Significant at 0.05 level of significance.

For one tailed test Tabulated ' $t_{.05}$ ' ( $n-1$ ) =  $t_{.05}$  (49) = 1.67



### **Fig-1. COMPARISON OF MEANS OF COLLEGE STUDENT IN SERGENT VERTICAL JUMP TEST AND SIT AND REACH TEST.**

The findings of the study revealed that both male and female non-athletic college students participated in the study improved significantly from pre-test to post-test on Sergeant Vertical Jump test (  $t = 10.922$  for Boys) ( $t = 13.378$  for Girls) and Sit and Reach test ( $t = 7.382$  for Boys) ( $t = 12.756$  for Girls).

#### **Discussion of Findings**

Flexibility is an important physiological component of physical fitness, and reduced flexibility can cause inefficiency in the workplace and is also a risk factor for low back pain. Increasing hamstring flexibility was reported to be an effective method for increasing hamstring muscle performance on selective isokinetic conditions (Worrell et. al 1994, pp. 154-159). The outcome of this study revealed that the application of proprioceptive neuromuscular facilitation stretching programme resulted in significant improvement in leg muscle strength and flexibility in both the groups. The implication of this finding is that an individual with hamstrings tightness and less strength would benefit from proprioceptive neuromuscular facilitation stretching programme. It is well known that gains in flexibility involve biomechanical, neurological and molecular mechanisms that determine myofibrillogenesis as a long-term result (De Deyne 2001, pp. 819-827, Gajdosik, 2001, pp. 87-101 and Coutinho et. al, 2004, pp. 1853-1861). The gains in flexibility can also be associated with increased tolerance to pain and increased viscous elastic Properties of the muscle-tendon units (Shrier and Gossal 2000, pp. 57-63 ). PNF (proprioceptive neuromuscular facilitation) techniques involve a partner actively stretching the participant by some combination of altering contraction and relaxation of both agonist and antagonist muscles. Some of the different PNF techniques used include slow reversal hold, contract relax, and hold relax. PNF stretching usually involves a 10 second push phase followed by a 10 second relaxation phase, typically repeated a few times. PNF stretching is capable of producing greater improvement in flexibility compared to other techniques. The ACSM recommends flexibility training a minimum 2 to 3 days per week holding each stretch for 10 to 30 seconds to mild discomfort; 3 to 4 repetitions per stretch. On a PNF stretches ACSM suggests a contract 6 seconds followed by a 10 to 30 second assisted stretch (American College of Sports Medicine, 2000). A key point brought up through research is that any good warm up and stretching technique can drastically lower a person's risk of becoming injured in any type of physical activity. Stretching is a good pre-exercise that has been shown to improve muscle flexibility, enhance physical performance, and prevent muscle injury (O'Sullivan 2009, pp. 101-109). Also, it is a highly accepted and suggested by athletic trainers, coaches, physical therapists, and athletes. With increased flexibility in the hamstrings enhances athletic performance is enhanced, and the risk of injury to the lower back and to the lower extremity is reduced (Decoster et. al 2004, pp. 330-334).

The effects of proprioceptive neuromuscular facilitation stretching programme are important clinically because the effects may relate to optimizing function and enhanced performance.

#### **Conclusion:**

In the light of the findings and limitations of the present study it was concluded that significant difference was observed between pre-test and post-test on Sergeant Vertical Jump test and Sit and Reach test for non athletic male as well as female non athletic college students .

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## **Gender Differences In Personality Characteristics Of Collegiate Kabaddi Players.**

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### **ABSTRACT**

The aim of the study was to find out the gender difference in Personality traits of Inter collegiate male and Female Kabaddi players with regard to psychoticism, neuroticism, extraversion, and Lie score. For this present study, 50 male and 50 female Kabaddi players were selected as a subject. The Eysenck Personality Inventory (E.P.I.) was used to measure Psychoticism, extraversion and neuroticism of Kabaddi players, t-ratios has been used to compare the significantly gender difference between male and female kabaddi players who were participated in Inter collegiate Kabaddi tournament held at R. P. College, Osmanabad. Gender differences on Psychoticism was found between male and female Kabaddi players (  $t = 2.87$ ;  $P < .05$  ) where female players more psychotic than male. While analyzing the differences of Personality characteristic of male and female Kabaddi players, gender differences on neuroticism was found between male and female Inter collegiate Kabaddi players ( $t=3.52$ ,  $P < .01$ ), where the male Kabaddi players was found to have less score on neuroticism. So, far extraversion was concerned, significant gender difference was found to the male and female Inter-Collegiate Kabaddi players ( $t=2.56$ ,  $P<.05$ ), male Kabaddi players has lower extraversion. Hence, a female Kabaddi player was more extravert.

**KEY WORDS :- Psychoticism, Extraversion, Neuroticism, Gender,**

### **INTRODUCTION**

Kabaddi is the most popular Indian game in Marathwada region of Maharashtra. The Indian games are simple in nature, easy to organize and less expensive. Hence Kabaddi reach to common people and both sex. Sports performance has been found to be related to some personality variables. Psychoticism, Extraversion and neuroticism are among the variables which influence by sports performance with addition to many other personality variables. Psychoticism is the tendency in a person to be not caring for people, troublesome insensitive and not fitting in any where lacking in feeling and empathy. Neuroticism is a minor mental disorder, characterized by inner struggles and discordant social relationship. According to Eysenck "Neuroticism refer to emotionality, initiated by the inherited differences in liability and excitability of autonomic nervous system. The extroversion is a personality traits. The extrovert persons orientation is towards the external world. He deals people intelligently in social situation. He is conventional, outgoing, social. Friendly and free from worries. In Eysenck's term, extraversion stands for central excitatory / inhibitory level and sociability. Lie scale is refer to social desirability measures a tendency on the part of some individuals take good. Majority of the investigator have indicated that male Kabaddi players differ from female Kabaddi players on a number of personality traits and several investigator have tried to find personality differences between male and female Kabaddi players, but not many studies have been made about personality characteristics of inter collegiate male and female with regards to psychoticism, neuroticism and extroversion, So the attempt has been made to conduct the study regarding neuroticism psychoticism and extroversion of inter collegiate male and female Kabaddi players.

### **HYPOTHESES OF THE STUDY**

There would be no significant gender difference with regard to (i) Psychoticism (ii) Neuroticism (iii) Extroversion (iv) Lie Score of the Male and Female inter collegiate Kabaddi players.

### **Significance of the Study**

To find out the gender differences in personality characteristics of inter collegiate male and female Kabaddi players with respect to Psychoticism, neuroticism, extraversion and Lie scale.

## **METHODOLOGY**

In this section, Selection of subject, Administration of the test, and Statistical Analysis procedure have been described.

**Selection of Subjects**Total 50 male and 50 female Kabaddi players from different college. Who were participating in Collegiate tournament held at R. P. College, Osmanabad-2009 were randomly selected as a subjects for the present study.

### **Administration of the test**

EYSENCK'S Personality Inventory (1985) were distributed to the males and females Kabaddi players, before filling the EPI, instruction were given by the investigator to the players.

### **Statistical analysis:**

t-ratio was computed to compare, the significant differences between inter-collegiate male and female Kabaddi players. The data were analyzed in basic language of the computer Centre, Aurangabad, Maharashtra. All the analysis used were based on "Standard Statistical Packages"

## **Results and Discussion**

The results of the present study in statistical form are presented in Table I and IV.

**Table – I: Mean scores, Standard Deviations and t-ratio of Psychoticism for Male and Female Kabaddi players.**

Sr. No.	Kabaddi players	No.	Mean	S.D.	t-ratio
1.	Male	50	11.09	3.22	2.87*
2.	Female	50	12.62	4.01	

\*Significant at .05 Level.

The findings of Table-I, reveals that there was significant gender difference between male and female inter-collegiate Kabaddi players. (  $t=2.87$ ,  $R<.05$  ), in psychoticism diminution of personality. The female having more psychotic as compared to males, which means that the male Kabaddi player having less psychotic than female Kabaddi players. Thus the hypothesis was not accepted. This may be due to nutritional habits, interest to participate in sports activities and parental motivation to involve sports activities of male and female Kabaddi players.

**Table – II: Mean scores, Standard Deviations and t-ratio of Neuroticism for Male and Female Kabaddi players.**

Sr. No.	Kabaddi players	No.	Mean	S.D.	t-ratio
1.	Male	50	9.88	2.38	1.88*
2.	Female	50	11.01	3.52	

\*Not significant

As Table-II shows no significant gender difference was found out in the extraversion of the inter-collegiate Kabaddi players. ( $t=1.88$ )

**Table – III: Mean scores, Standard Deviations and t-ratio of Extraversion for Male and Female Kabaddi players.**

Sr. No.	Kabaddi players	No.	Mean	S.D.	t-ratio
1.	Male	50	13.17	2.01	3.75*
2.	Female	50	14.90	2.56	

\*Significant at .01 Level.

As Table – III shows a significant gender difference was found of in the extraversion of the inter-collegiate Kabaddi players. ( $t=3.75$ ,  $P<.01$ ), the female having more extrovert as compared to males, which means that the male Kabaddi players less extrovert than female Kabaddi players. Thus the hypothesis was not accepted. There difference is probably due to emotional, biological and social difference between the male and female Kabaddi players.

**Table – IV: Mean scores, Standard Deviations and t-ratio of Lie Scale for Male and Female Kabaddi players.**

Sr. No.	Kabaddi players	No.	Mean	S.D.	S.E.	t-ratio
1.	Male	50	10.07	3.09	.45*	1.85 NS
2.	Female	50	11.28	3.36		

\* Not Significant

The findings of Table-IV, that there is no significant gender difference between male and female inter-collegiate Kabaddi players. ( $t=1.85$ ). It may be due to similarity of the nature of game. Thus the hypothesis was accepted.

### **CONCLUSIONS**

1. There was significant gender differences in psychoticism of inter-collegiate Kabaddi players, the males having less psychotic than female Kabaddi players.
2. There was no significant gender differences in neuroticism of inter-collegiate Kabaddi players, the males having less neurotic tendency than the females.
3. There was significant gender differences in extraversion of inter-collegiate Kabaddi players. The males are found to be less extrovert than the females.
4. There was no significant gender differences in Lie-score of inter-collegiate Kabaddi players.

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## Effect Of Yogic Practices On Blood Pressure And Blood Glucose Among Women Diabetic Patients

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**Abstract:**The purpose of the present study was to find out the effect of yogic practices on blood pressure and blood glucose. For this purpose, thirty women diabetic patients around Annamalainagar, Chidambaram, Cuddalore District, Tamilnadu in the age group of 35 – 40 years were selected. They were divided into two equal groups, each group consisted of fifteen subjects, in which group – I underwent yogic practices and group – II acted as control that did not participate in any special activities apart from their regular day-to-day activities. The training period for this study was six days in a week for twelve weeks. Prior to and after the training period the subjects were tested on blood pressure (systolic and diastolic) and blood glucose. Blood pressure was measured by using sphygmomanometer and after taking 5 ml of blood samples by venous puncture method, blood glucose was measured by using Boehringer Mannheim Kit Method. The Analysis of Covariance (ANCOVA) was used to find out any significant difference between the pre-test mean and post-test means and significant difference that exists between the yogic practice group and control group on selected criterion variables. It was concluded from the results of the study that the yoga practice has decreased the blood pressure (both systolic and diastolic) significantly ( $P > .05$ ). The result of the study also shown that there was a significant reduction in blood glucose after the yogic practices ( $P > .05$ ). It was also found that there was a significant difference was occurred between the yogic practice group and control group on blood pressure and blood glucose level.

### INTRODUCTION:

Yoga is one of the most ancient cultural heritage of India. The word *yoga* in Sanskrit means "to unite", and so *yoga* can be said to connote a unitive discipline. In this sense it is an exercise in moral and mental cultivation that generates good health (*arogya*), contributes to longevity (*chirayu*), and the total intrinsic discipline culminates into positive and perennial happiness and peace. Yoga is one of the size orthodox systems of Indian philosophy. It was collated, coordinated and systematized by patanjali in his classical work, the yoga sutras, which consists of 185 terse aphorisms. In Indian thought, everything is permeated by the supreme universal spirit (paramatma or God) of which the individual human spirit (jivatma) is a part. Diabetes mellitus is a group of metabolic diseases characterized by high blood sugar (glucose) levels, that result from defects in insulin secretion, or action, or both. Diabetes mellitus, commonly referred to as diabetes was first identified as a disease associated with "sweet urine," and excessive muscle loss in the ancient world. Elevated levels of blood glucose (hyperglycemia) lead to spillage of glucose into the urine, hence the term sweet urine. Normally, blood glucose levels are tightly controlled by insulin, a hormone produced by the pancreas. Insulin lowers the blood glucose level. When the blood glucose elevates (for example, after eating food), insulin is released from the pancreas to normalize the glucose level. All the carbohydrates in the diet must be reduced to monosaccharides by way of digestion before they can be used by the body as a sources of energy. The most common or simplest monosaccharides (one that has single 6 – carbon sugar molecule) carbohydrate is glucose which can be oxidized and used directly by the body for energy or it may be broken down by the digestive system and converted into glycogen (a polysaccharide) and stored in the muscle and liver for later use. It is interesting to note that once the storage capacity for glycogen has been reached in the muscles and liver, the excess glucose is converted into fat and stored in the fatty (adipose) tissue of the body.

## METHODOLOGY:

To achieve the purpose of the study 30 women diabetic patients living around Annamalainagar, Chidambaram, Cuddalore District, Tamilnadu were selected as subjects and their age ranged between 35 and 40 years. They were divided into two equal groups, such as, Group - I underwent yoga practices (n = 15) and Group - II acted as control (n = 15), which did not undergo any training apart from their day-to-day activities. The yogic practice period for the present study was six days (Monday to Saturday) per week for twelve weeks. For every training programme there would be a change in various structure and systems in human body. So, the researchers consulted with the yoga experts, then selected the following variables as criterion variables: 1. Blood pressure and 2. Blood glucose. The blood pressure was assessed by administering sit-ups test and blood glucose was measured by using the Boehringer Mannheim Kit method. For the purpose of collection of data on blood pressure the sit-ups test was administered and on blood glucose, the subjects were asked to report at early morning, one day prior to the commencement of training and one day after the training, in fasting condition. 5 ml of blood was collected from each subject by venous puncture method and the blood thus collected was stored in small bottles for pre and post-test.

## ANALYSIS OF THE DATA

The data collected prior to and after the yogic practice period on blood pressure and blood glucose on yoga practice group and control group were analysed and presented in the following Table – I

**Table – I**  
**Analysis of Covariance and ‘F’ ratio for Systolic and Diastolic Blood Pressure and Blood Glucose for Yogic Practice Group and Control Group**

Variable Name	Group Name	Yogic Practice Group	Control Group	‘F’ Ratio
Systolic Blood Pressure (mmHg)	Pre-test Mean $\pm$ S.D	136.33 $\pm$ 5.996	136.60 $\pm$ 5.717	0.016
	Post-test Mean $\pm$ S.D.	133.87 $\pm$ 5.975	138.13 $\pm$ 4.853	4.609*
	Adj. Post-test Mean $\pm$ S.D.	133.985	138.15	43.836*
Diastolic Blood Pressure (mmHg)	Pre-test Mean $\pm$ S.D	90.60 $\pm$ 3.641	90.53 $\pm$ 3.420	0.003
	Post-test Mean $\pm$ S.D.	88.13 $\pm$ 3.720	91.00 $\pm$ 3.094	5.266*
	Adj. Post-test Mean $\pm$ S.D.	88.104	91.029	28.033*
Blood Glucose (in mg/dl)	Pre-test Mean $\pm$ S.D	134.53 $\pm$ 1.685	135.33 $\pm$ 1.633	1.744
	Post-test Mean $\pm$ S.D.	132.87 $\pm$ 1.807	135.47 $\pm$ 1.846	15.188*
	Adj. Post-test Mean $\pm$ S.D.	133.239	135.094	24.579*

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 1 and 28 and 1 and 27 were 4.20 and 4.21 respectively).

## RESULTS:

The analysis of covariance (ANCOVA) was used to find out the significant difference if any, among the experimental group and control group on selected criterion variables separately. In all the cases, .05 level of confidence was fixed to test the significance, which was considered as an appropriate.

After applying the analysis of covariance, the result of this study showed that there was a significant decrease in systolic and diastolic blood pressure for the yogic practice group and also there was a significant decrease in the blood glucose. Further, comparing the adjusted post-test means of the criterion variables, such as the systolic blood pressure (F-ratio – 43.836  $p > 0.05$ ) and diastolic blood pressure (F-ratio – 28.033  $p > .05$ ) the yogic practice group was significantly increased and in the level of blood glucose there was a significant decrease (F – ratio - 24.579  $p > 0.05$ ) after the yogic practices. The results of the study also shown that there was a significant difference in blood pressure (both systolic and diastolic) and blood glucose level between the yogic practice group and control group.

## CONCLUSIONS:

1. It was concluded the results of the study that there was a significant improvement in systolic and diastolic blood pressure (Pramanik, *March 2009* and Bharshankar *et al*, 2003) and also in blood glucose level (Lorenzo Gordon *et al*, 2008 Malhotra *et al*, December 2005 and Amita *et al*, 2009) among diabetes patients after the twelve weeks of yogic practice.
2. It was also concluded from the results of the present study that there was a significant difference was occurred between the yogic practices group and control group on blood pressure and not in the blood glucose level.

The following asanas were given:

Yogasanas: Suryanamaskar, Padmasana, Trikonasana, Dhanurasana, Ardhamatsyendrasana, Vajrasana, Yoga Mudra, Pavan Muktasana, Sarvangasana, Halasana, Matsyasana **Pranayama:** Nadi Shodhan, Bhramari, Bhasrika, Moola Bandha and Uddiyan BandhaYoga Nidra

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## Doping control: An Indian Perspective

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### **Abstract**

The high number of athletes testing positive in India for anti-doping controls attests that the current strategy might be analytically adequate to unmask most (but not all) doping practices, but it is probably ineffective to prevent athletes to dope and modify this upsetting trend. Owing to the complexity of the doping phenomenon, simultaneous consideration of physiological, medical, pharmacological, psychological, ethical and systemic factors is required in order to be successful in this endeavour. The need for effective deterrence policy is underscored by the fact that the problem of performance enhancements has spread beyond the elite athlete population. It is well documented that groups other than competitive athletes are at risk of using doping agents, especially steroids. The current anti-doping policy should be replaced with a more efficient and practical strategy to identify and monitor abnormal and harmful deviations of the biochemical and haematological profiles. The ethical foundation of the war on doping consists of largely unsubstantiated assumptions about fairness in sports and the concept of a "level playing field". Constant improvement of dope free performance is, after all, the core characteristic of competitive sport.

**KEYWORDS:** Doping; Anabolic steroids, Anti-Doping Code, Sport Supplement etc

**Introduction:** Humans have long sought to enhance their "athletic" performance to increase body weight, aggressiveness, mental concentration and physical strength, contextually reducing fatigue, pain, and improving recovery. Although regular training is the mainstay for achieving these targets, the ancillary use of ergogenic aids has become commonplace in all sports. Doping in sport has a deeper philosophical and ethical dimension with the emergence of a new medical paradigm: enhancement medicine. In the contemporary biomedicine, the new medicines and technologies can be used not only to cure the patients but also to enhance human capacities. This evolution represents a paradigmatic change in the medical practice: it is not the mere restoration of health which is expected anymore, nor the promotion of health. The demarcation between ergogenic aids and doping substances or practices is continuously challenging and mostly based on perceptions regarding the corruption of the fairness of competition and the potential side effects or adverse events arising from the use of otherwise unnecessary ergogenic substances.

**Growing Cases of Dope in India:** NADA report of 13<sup>th</sup> April 2012, Indian captain and goalkeeper Adrian D'Souza's 'A' sample taken during the World Series Hockey (WSH) returned positive. Adrian's sample (code 2217617), collected by the National Anti-Doping Agency (NADA) on March 21, was found to have a higher concentration of tetrahydro-cannabinol (THC) (Metabolite of Marijuana) Cannabin-oids. Though cannabis is not a performance enhancing drug it has been on the list of banned substances issued by the World Anti-Doping Agency (WADA) and have violated Article 2.1 of the NADA and WADA Anti-Doping Code, therefore carries the same penalties as other drugs. India's National Anti Doping Agency in its press release on 8<sup>th</sup> March, 2012 affirmed that three athletes have tested positive for using banned substances during two national level meets held in Feb. 2012. Two athletes were caught during a national rowing championship held at Hyderabad. One of them tested positive for the stimulant methylhexaneamine and the other one for the anabolic steroid nandrolone. The third athlete tested positive for methylhexaneamine during a national taekwondo championship held at New Delhi. National School Games in Jan. 2012 eleven athletes were positive out of 81 samples tested by NADA during the games, those tested positive were five boxers, three wrestlers and three weightlifters. Hardly there is any month when we don't have news of Indian athletes caught for drugs abuse. The main reason for it is lack of knowledge and awareness of doping-related matters is common in Indian athletes. On 25 Nov. 2011 Sports Authority of India had submitted two lists of dope offenders -- of 257 and 301 athletes -- before the

Delhi High Court, one on July 24, 2001 (pertaining to 1991 to 2001) and the other in 2009 (pertaining to 2001 to 2008)

The list may include the name of eminent athlete of all time but no action were taken against them as it is advocated that the labs where they were tested positive was not accredited with WADA. National Anti Doping Agency, New Delhi banned 68 athletes (78 male & 10 females) in 2010 includes, 90 ( 67 males & 23 females) in 2012 and up to 12 March 2012 it banned 37 athletes (27 males and 10 females) for using banned substances.

**Prohibited Substances and Methods:** International anti-doping efforts are harmonized and regulated under the umbrella of the World Anti-Doping Code and the corresponding Prohibited List, issued annually by the World Anti-Doping Agency (WADA). Forty five years ago, the only prohibited substances were those capable of producing a significant effect on sports performance only if administered, in sufficient amounts, right before or during the competition. The necessity for a frequent and timely update of the Prohibited List (as the result of a comprehensive consultation process and subsequent consensual agreement by expert panels regarding substances and methods of performance manipulation in sports) is due to the constantly growing market of emerging therapeutics and thus new options for cheating athletes to illicitly enhance performance. In addition, 'tailor-made' substances arguably designed to undermine sports drug testing procedures are considered and the potential of established drugs to represent a doping substance is revisited in light of recently generated information. In the last four decades, the 'prohibited list' progressively expanded, being periodically updated, first by the IOC Medical Commission itself, and then by the World Anti- Doping Agency (WADA), to reach its present format given bellow in table - 1:

**Table – 1**

**The World Anti-Doping code - 2012 'prohibited list'**

(In accordance with Article 4.2.2 of the World Anti-Doping Code, all Prohibited Substances shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and Prohibited Methods M1, M2 and M3.)

**Substances and methods prohibited at all times (in and out of competition)**

**Prohibited substances**

S1. Anabolic agents

1. Anabolic androgenic steroids (AAS)

a. Exogenous AAS (e.g. methyltestosterone, nandrolone, stanozolol)

b. Endogenous AAS (e.g. testosterone, androstenedione, DHT, DHEA)

*("Exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally, Where as "Endogenous" refers to a substance which is capable of being produced by the body naturally)*

2. Other anabolic agents (e.g. clenbuterol, selective androgen receptor modulators)

S2. Hormones and related substances (e.g. EPO, hGH, IGFs, gonadotropins, insulins)

S3. Beta-2-agonists (e.g. salbutamol, salmeterol, terbutaline, formoterol)

S4. Hormone antagonists and modulators (e.g. antiestrogens, myostatin inhibitors)

S5. Diuretics and other masking agents (e.g. diuretics, epitestosterone, probenecid, alpha-reductase inhibitors, plasma expanders)

**Prohibited methods**

M1. Enhancement of oxygen transfer (e.g. blood transfusions, use of blood derivatives and analogs)

M2. Chemical and physical manipulation (e.g. tampering, intravenous infusions)

M3. Gene doping

**Substances and methods prohibited 'in-competition'**

S6. Stimulants (e.g. amphetamines, cocaine, strychnine, ecstasy-like drugs)

S7. Narcotics (e.g. morphine, opioids)

S8. Cannabinoids (e.g. hashish, marijuana)

S9. Glucocorticosteroids

**Substances prohibited in particular sports**

P1. Alcohol P2 Beta - blockers

Since in the preface of the Prohibited List, the WADA clearly mandates that “The use of any drug should be limited to medically justified indications” it is clear that the potential health risks of several permitted supplements and drugs, which are conventionally considered safe and are not routinely included within anti-doping testing, are currently overlooked. Just because a substance is sold over the counter does not necessarily mean that it is safe. The increasing use of ergogenic aids by athletes is an issue that intersects with the degree that a large number of supplements may contain substances that are banned in sport. In fact, the sport supplement industry is an area of major controversy with respect to liability, as it is poorly regulated when compared with prescription drugs, but yet it is a potential source of doping violations. Tackling with issues of contamination in food supplements WADA and National anti doping agencies issue advisories time to time. One such advisory was issued from NADA in Feb., 2012, that certain food supplements available in the market contained active ingredient of Methylhexaneamine (MHA).

**Table – 2  
Supplements contained with Methylhexaneamine (MHA).**

S. No.	Name of the Supplement	Active Ingredient (labeled)	Manufacturer
1.	Jack 3 D	1, 3-dimethylamylamine	USP Labs, USA
2.	Hemo Rage Black	Methylhexaneamine	Nutrex, USA
3.	Neurocore	Geranium extract	Muscle Tech, USA
4.	Launch	Geranium Oil Extract	SAN cor. CA
5.	CO2	1, 3-dimethylamylamine	ESP, US

The WADA and national sport governing bodies have added preventive measures to their detection programs. Examples for anti-doping prevention include: WADA's Athlete Outreach Program (launched in 2001) targeting top performing athletes at major sporting events, the Anti-Doping Development Program (started in 2004), which aims to help countries and organizations to set up quality doping control, and the Educational Programme, which is a major tool of the WADA in an attempt to create a doping free culture by providing education to all stakeholders about the dangers of doping and its consequences. WADA has increased number of testing laboratories, reaching the present tally of 36 laboratories (Table 2), spreading through out the world. These labs are analyzing more than 200000 biological samples per year.

**Table 2.**

**The 36 anti doping laboratories accredited by the World Anti-Doping Agency as on March, 2012.**

1. **Asia (Total No. - 7):** China (Beijing), Korea (Seoul), Japan (Tokyo), Malaysia (Penang), Thailand (Bangkok), New Delhi (India), Almaty (Kazakhstan)
2. **Africa (Total No. - 2):** South Africa (Bloemfontein), Tunisia (Tunis).
3. **Americas (Total No. - 6):** Brazil (Rio de Janeiro), Canada (Montreal), Colombia (Bogota), Cuba (La Habana), United States (Los Angeles, Salt Lake City).
4. **Europe (Total No. - 20):** Austria (Seibersdorf), Belgium (Ghent), Czech Republic (Prague), Finland (Helsinki), France (Paris), Germany (Cologne, Kreischa), Greece (Athens), Italy (Rome), Norway (Oslo), Poland (Warsaw), Portugal (Lisbon), Russian Federation (Moscow), Spain (Barcelona, Madrid), Sweden (Stockholm), Switzerland (Lausanne), Turkey (Ankara), United Kingdom (London), Romania (Bucharest).
5. **Oceania (Total No. - 1):** Australia (Sydney)

Despite the increased anti-doping effort, the relative number of adverse analytical findings has not decreased considerably over the years in India. The appropriateness of education as a deterrent is questionable as it has been shown that doping specific knowledge is higher among doping users than among their non-user counterparts. While prevention, complemented with detection, will be likely to be the main approach to the doping problem, the ultimate goal for sport governing bodies should be creating policies for a truly effective deterrence. Setting detection aside, there is still a fundamental distinction

between prevention and deterrence. It is suggested that prevention (and detection) create an environment where the chances of detection and punishment for using doping are uncomfortably high, hence keep athletes away from employing such means, regardless of their motives. On the other hand, value-based deterrence in its true, perhaps Utopian sense, is associated with the creation of an environment where athletes never feel motivated to use illegal means for performance enhancement. Athletes are, by nature, highly motivated and achievement oriented individuals and have grown to appreciate methods for performance enhancement (training, nutrition, physiotherapy, equipment, etc.). The distinction between acceptable and prohibited methods must be made clear and convincing to all. To be effective, authorities must be able to i) justify the doping ban in general, ii) use evidence-based selection of substances and methods included into the prohibited list, iii) use the same criteria for all substances and methods, and iv) communicate such decisions to all stakeholders.

## Conclusion

The challenge of developing a rigorous global antidoping program requires acceptance of doping as a problem by sport organizations, athletes, and public authorities. Individual stakeholders must be prepared to preserve the values of sport, which means free from doping. This will require vigilance by all interested parties for the benefit of elite athletes and society overall. Anti-doping education and perhaps changes in attitudes to doping is a rather futile approach if the other influencing factors are kept unchecked. A value-based deterrence requires changes at all levels and in all stakeholders. Large scale research aiming to understanding the driving forces behind doping behavior and gaining knowledge of effective deterrent factors is much needed and should be extended beyond the athlete population to include coaches, physical educators managers, officials and parents. Sport governing bodies and anti-doping organisations are in the unique position to endorse and foster such research. International and national anti-doping organisations should make targeted funding opportunities for doping-related research aiming at increasing knowledge regarding both the doping behaviour and alternative acceptable means of performance enhancement.

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## The comparison of overtraining syndrome indexes and body composition of Fc.Aboomoslem Players

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### Abstract:

Overtraining syndrome frequently occurs in athletes who are training for competition or a specific event and train beyond the body's ability to recover. The purpose of this study was to comparison of overtraining indexes and body composition of elite youth football players during of general and pre-competition phases. This study carried a semi – experimental methodology. In this study, 20 elite youth and healthy football players, ABOOMOSLEM competition as study's subject that too well trained. The executive method of the study was such that after of elementary awareness, two blood samples were taken and analyzed in laboratory. For data analysis we performed descriptive statistics (average, standard deviation, variance and frequency tables) and inferential statistics (t.test) Using SPSS software. Physical aspects of the subjects before entered to general phase were consisted of; age ( $19.25 \pm 0.78$ ) years, body weight ( $74.31 \pm 1.98$ ), skeletal- muscular mass ( $40.41 \pm 1.01$ ) kg, BMI ( $22.57 \pm 0.34$ )  $\text{kg.m}^{-2}$ , and training experience ( $7.4 \pm 0.86$ ) years. During of data analysis, there were significance different between of total testosterone in pre and post of the different training phases that include general and special preparation and Pre-composition ( $t_{19} = 23.79$ ,  $p = 0.000$ ). Also, in amounts of cortisol between different training phases were significant different ( $t_{19} = 16.92$ ,  $p = 0.000$ ). As for to results of the study, it recommended to football coaches, first they must be notation to overtraining indexes that employing this study and second, to use of recovery, tapering and more execute of the various training, prevention of elite youth football players from dangerous of affection to overtraining syndrome.

**Key words:** overtraining syndrome, total testosterone, ratio of testosterone to cortisol

### Introduction:

Overtraining is defined as excessive training, characterized by long-lasting fatigue and worsening of competitive performance with further attempts to improve physical condition<sup>(6)</sup>. Overtraining may also be described as staleness, overwork, over-reaching, burnout and chronic fatigue. Fatigue and underperformance are common in athletes. Understanding overtraining syndrome (OTS) is helpful in the evaluation, management, and education of athletes<sup>(7)</sup>. Although improvements in athletic performance hinge on increasing the training load or "over-reaching", overtraining - a vicious circle of more training producing lower performance and chronic fatigue – seems to be a stress response to training too hard too often, with insufficient recovery time between exercise bouts. In some cases, the term overtraining may not be appropriate, as other stressors (e.g. psychological, lifestyle, malnutrition, and infection) may be responsible for underperformance. Perhaps a better terminology is the description of this syndrome as "unexplained underperformance, confirmed by the athlete and coach that are not resolved following at least two weeks rest". This definition recognizes that the cause of the underperformance and chronic fatigue is not necessarily solely related to the training load<sup>(6)</sup>.

The "catch them young philosophy" that matched the beliefs of many coaches who think that in order to

achieve success at senior level it is necessary to start intensive training well before puberty <sup>(1)</sup>, That has meant many of our youngsters are training intensively and for considerable hours by the time they become adolescents<sup>(2)</sup>. Such heavy loads that potentially causes the athlete to engage in very hard training without being aware if it really is of benefit for his / her own performance <sup>(3)</sup>. So, the combination of heavy training, inadequate recovery and imitated social support networks for the young athlete can result in overtraining in even young and aspiring elite athlete <sup>(3,4)</sup>. During of it, sport discipline of football. Also need to a study to paying to the comparison of overtraining indexes (testosterone, cortisol, and testosterone to cortisol ratio and rest heart rate) and body composition in football. It is therefore important that sport scientists, coaches, medics and parents start to become aware of the potential negative health implication (physical and physiology) of such training practices in young athletes<sup>(2)</sup>, that purpose of this study was to comparison of overtraining indexes and body comparison of elite youth football players during of general and pre-competition phases.

**Methods of the study:** This study carried a semi – experimental methodology. In this study, 22 elite youth and healthy football players of ABOOMOSLEM club (one of the club’s of one’s league of Iran) competition as study’s subject that too well trained. It necessary to mention that 2 subject from persons of this group because of severe injuries, notable to participation to general and special phases and so, our study were followed with group of 20 football players as subject. The execute method of the study was such that after of elementary awareness two blood samples were execute in other to; A) first sampling executed before start of general preparation phase and B) second sampling executed after end of Pre-competition phase and before start of competition phase. In order to data analysis, we performed descriptive statistics (average, standard deviation, variance and frequency tables) and inferential statistics (t.test) Using SPSS software. Level of significant were accepted at  $p < 0.05$ .

**Results:** Physical aspects of the subjects before entered to general phase were consisted of; age ( $19.25 \pm 0.78$ ) years, body weight ( $74.31 \pm 1.98$ ), skeletal- muscular mass ( $40.41 \pm 1.01$ kg), BMI ( $22.57 \pm 0.34$  kg.m<sup>-2</sup>), and training experience ( $7.4 \pm 0.86$ ) years. During of data analyzing, between of total testosterone in pre and post of the different training phases (general and special preparation and Pre-composition) were significant different ( $t_{19} = 23.79$ ,  $p = 0.000$ ). Also, in amounts of cortisol between different training phases were significant different ( $t_{19} = 16.92$ ,  $p = 0.000$ ). There were not significant decreasing in testosterone to cortisol ratio in second sampling ( $t_{19} = 1.75$ ,  $p = 0.096$ ). In addition, there were significant increasing pre and post different training phases in amounts of rest heart rate ( $t_{19} = -11.41$ ,  $p = 0.000$ ). In the end, between all of body composition indexes (weight, fat mass, skeletal-muscular mass and BMI) during pre and post of the different training phases, there was significant different ( $p < 0.05$ ).

Variables	Mean		Standard deviation		t	Significant levels
	Before training phases	After training phases	Before training phases	After training phases		
Testosterone (ng.dL <sup>-1</sup> )	576.35	432.84	36.08	38.71	23.79	0.000 <sup>†</sup>
Cortisol (micg.dL <sup>-1</sup> )	7.42	9.13	0.8	0.82	-16.92	0.000 <sup>†</sup>
Test to Cort ratio (micg.dL <sup>-1</sup> )	0.2	0.061	0.09	0.011	1.75	0.096
Resting heart rate (bit. Min <sup>-1</sup> )	66.7	71.5	1.98	1.85	-11.41	0.000 <sup>†</sup>
Weight (Kg)	74.31	70.43	1.89	1.75	3.2	0.005 <sup>†</sup>
Skeletal – Muscular Mass (Kg)	40.41	38.78	1.04	1.01	7.6	0.000 <sup>†</sup>
Fat Mass (Kg)	12.79	10.53	0.5	0.47	27.02	0.000 <sup>†</sup>
Body Mass Index (Kg.m <sup>-2</sup> )	22.57	20.82	0.33	0.34	104.59	0.000 <sup>†</sup>

<sup>†</sup> Significant level at  $P < 0/05$

Table1. Show the indexes of overtraining syndrome and body composition, before and after of general preparation, specific preparation and pre-competition phases

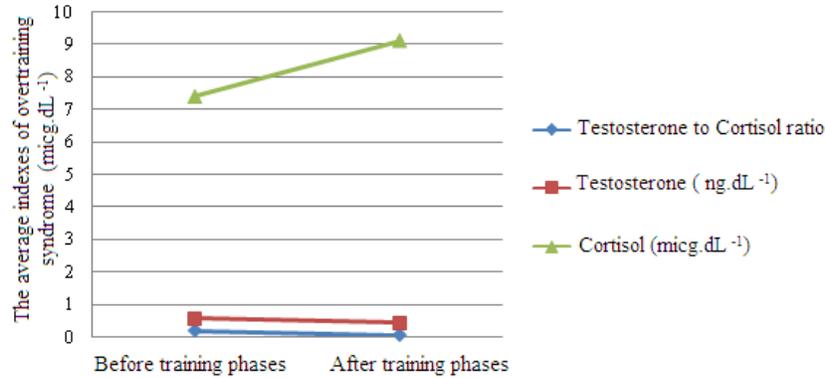


Figure 1-Show levels of Testosterone, Cortisol and Testosterone to Cortisol ratio before and after of general preparation, specific preparation and pre-competition phase

### Conclusion :

As for to results of the study, determinate that elite youth football players with execute of different physical activates, during different training phases (general and special preparation and Pre- competition) faced to overtraining syndrome. As the base of it, amounts of testosterone and cortisol hormones in serum, after of different training phases, statically decreased and increased, respectively, also, testosterone to cortisol ratio, as mention to main factor for determination of overtraining syndrome, decreased. In fact, it showed creation of acute stages of it syndrome not statically significant. In addition, amounts of SMM, fat percent and also weight of the football players decreased, significantly that can be to important factor for determination of this syndrome <sup>(2)</sup> In parallel to it, amounts of rest heart rate in elite youth football players significantly after second sampling were increased that it can be one of simple indexes but less validity in determination of syndrome overtraining <sup>(2)</sup>. At the end, it necessary to mention that the results of the study consonant with results of Moragan et al (1988), Kentta et al (2001) and Coakley et al (1992) that they also were mentioned overtraining prevails in your manuscripts <sup>(5,4,3)</sup>. In conclusion, as respect consideration to results of the study that overtraining syndrome have prevalent in youth athletes and also it necessary to discover the manners that determination of elite football players that have overtraining or they are in limits of affection to it, recommended to football coaches, first they must be noted to overtraining indexes that employing this study and second, to use of recovery, tapering and more execute of the various training, prevention of elite youth football players from dangerous of affection to overtraining syndrome.

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## A Comparative Study Of Body Image Among Working Women Of Greater Gwalior

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### **Abstract**

A good body image is an indispensable thing to have, whereas a negative body image can be detrimental to women especially to those who are working. The aim of the present investigation was to compare the body image of working women belonging to different profession at the greater Gwalior. It was hypothesized that there would be significant difference between the subjects from different profession. 100 working women, who voluntarily agreed to fill in the questionnaire, were taken for the study. They were further divided to two major groups that is teachers (N= 67) and other profession such as policeman, crew, sales executive, doctor (N= 33) respectively. The subjects were administered with Body Image Questionnaire (BIQ,) developed by Marilou Bruchon-Schweitzer containing 19 questions being presented as bipolar items. Statistical analysis was performed on the data using the independent t - test. The obtained t value of 1.97 is lesser than the tabulated t-value of 1.98 at 98 degree of freedom at 0.05 levels. Thus the result revealed that there was no significant difference seen on body image between teachers and other profession (P> 0.05). Thus the hypothesis stated was rejected. This may be owing to the reason of sample size being very small. However, it was seen that the working women were satisfied with their body image as the obtained mean and SD of teachers and other professionals were  $68.85 \pm 8.83$  &  $71.42 \pm 10.77$  respectively.

**Key Words:** Body Image, Bipolar items.

### **Introduction**

Our society has been obsessed with looks where most people especially women are concerned about their physical appearance, attractiveness, and beauty. For most of the working women body image is an everyday issue. Female are more socialised than males to focus on external aspects of themselves, such as their appearance. Learning to do their hair, polish their nails and paint their faces is virtually a rite of passage into womanhood in our culture. Males on the other hand are typically socialised to concentrate on their athletic abilities rather than their looks. In addition attractiveness is not the prerequisite for masculinity as it is for femininity in our culture (Sobal, 1995). They have been brought up being taught that a good body image is extremely important in life. Our society is constantly telling us how we can improve ourselves in every way, shape, and form; so it is pretty hard for these young girls to believe that they are just fine the way that they are. This adequately explains how adolescent girls can develop depression when they are continually being reminded that they are not what they "should" be (Koff and Rierdan ,1997). Garner (1997) defines body image as more than just how a woman feels about her body, he says it is a woman's mental representation of herself. Body image is influenced by our feelings, behaviours, thoughts, self-esteem, and the world around us. Garner also says that body image is not just affected by what a woman sees in a mirror, but also by positive and negative experiences with family and friends, emotional factors, anxiety, and different cultural factors. He has reported that the intense pressure of women to conform to the ultra thin beauty ideals of the media has lead to dramatically low body images in women and an epidemic of eating disorders. He also reported that in a 1997 Psychology Today survey 24% of women would trade three years of their life and 15% would trade five or more years of their life if they could be their ideal weight. This demonstrates what a drastic effect body image and specifically weight can have on women.

**Purpose :**The purpose of the study was to compare the body image of working women belonging to greater Gwalior which were into two major groups that is teachers and other professions such as policewomen, crew, sales executives, doctors and advocates respectively. It was hypothesized that there would be significant difference between the teachers and employees of other profession.

**Materials and Methods:** For this purpose, 100 working women from different professions who voluntarily agreed to fill the questionnaire were taken as subjects for the study. They were further divided using random assignment into two major groups: Teachers (N=67) and other profession such as doctor, crew, sales executive, advocate, policewomen (N= 33) respectively. The subjects were administered with Body Image Questionnaire (BIQ by Marilou Bruchon Schweitzer,1987). There were 19 bipolar items asking about the views on their body image. This was a study based on investigation in which the dependent variable (DV) was the body image of the women. Upon completing the questionnaire it was computed for statistical analysis. The Statistical measure applied for the present data was independent t -test.

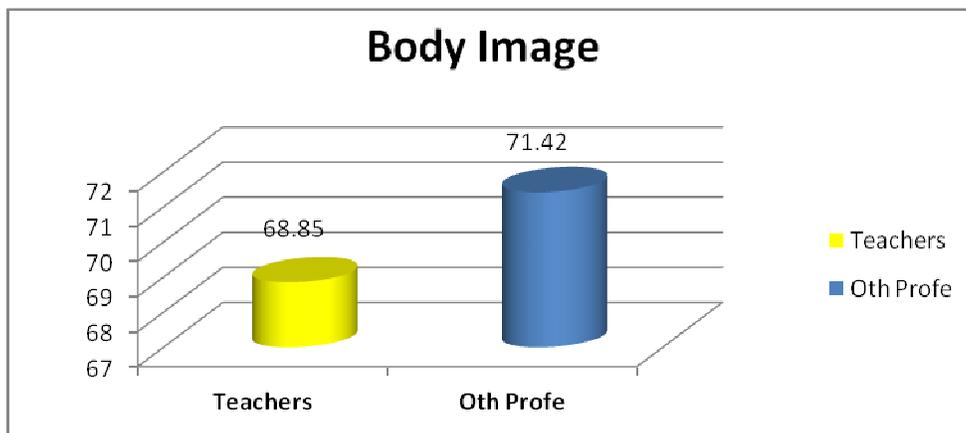
**Results and Discussion**For the purpose of the testing the hypothesis the data were subjected to statistical analysis. Descriptive statistics like mean and standard deviation and comparative statistics like t-test were calculated and the outcome generated are mentioned below:

**Table- 1**  
**THE COMPARISON OF BODY IMAGE OF TEACHERS AND OTHER PROFESSION**

	CODE	N	Mean	Std. Deviation	t	df	Sig
BODY IMAGE	TEACHERS	67	68.8507	8.82705	-1.273		
	OTHER PROFESSION	33	71.4242	10.77042	-1.190	98	.224

t- value< 0.05 at 98 df. (1.98)

The table 1 displays the mean and the standard deviation of the body image score of teachers and other professionals. The mean and standard deviation of teachers and other professionals are  $68.85 \pm 8.82$  and  $71.42 \pm 10.77$  respectively. When the body image score of the woman teachers and other professional were compared, then the t test yield no significant difference between these two groups, as the calculated 't' value was lesser than the tabulated t value at 98 df at 0.05 level of significance. The mean score of the body image scores of teachers and other professionals are illustrated in the figure 1.



**Fig .1: COMPARISON OF BODY IMAGE OF TEACHERS AND OTHER PROFESSION**

## **Conclusion**

Research studies shown those females are more socialized than males to focus on external aspects of themselves, such as their appearance. Males on the other hand are typically socialized to concentrate on their athletic abilities rather than their looks. In addition attractiveness is not the prerequisite for masculinity as it is for femininity in our culture (Sobal, 1995). Unlike the literature views, the study has shown no significant difference among the teachers and other professional women of greater Gwalior. There can be numerous reasons which might have contributed to this kind of result. The physical activity level of the various professionals and teachers might be same, though the kind of the professional duties varies. This may be owing to the reason of sample size being very small. Howsoever, it was seen that the working women were satisfied with their body image.

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## **A History of doping in sport, commercialization and Misusing of Bureaucratic authority**

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### **Introduction:**

From about 400 BC, sport achieved a status in the social life of Greece, similar to its place in society today. Mass spectator sport was the order of the day and rich prizes for winners led to the emergence of a class of highly paid athletes, resulting in the end of the amateur athlete. Writings from the time of Plato reveal that the value of a victory in the ancient Olympics was the equivalent of nearly half a million dollars. This was complemented by other rewards including food, homes, tax exemptions, and athletes were even allowed to skip military service. Professionalism and commercialism ultimately led to corruption. Bribing and cheating became commonplace, and competitors were said to be willing to take any 'magic potion' which might enhance their performance, including extracts of mushrooms and plant seeds. In addition to political interference, one of the significant reasons for the dissolution of the ancient Olympic games was the use of drugs. The increased status of sport and the elevated position of athletes continued into the Roman period. However, the Romans liked other sporting activities than the Greeks had. Many spectators came to gladiatorial competitions and chariot races, and these sporting events reigned as a source of public entertainment ("Give them bread and circuses"). To accommodate the huge following, the Coliseum was restructured in 100AD to hold 60,000 spectators. The use of drugs during this period has also been recorded, according to ASDA. Chariot racers fed their horses a potent mixture to make them run faster, while many gladiators were 'doped-up' to make their fights sufficiently vigorous and bloody for the paying public. The onset of the Christian era signalled the end of these early games. The bloodletting nature of many of the Roman 'sports' was unacceptable to the new order in society. Eventually, in 396AD, the Emperor Theodosius called an end to the ancient games with a rule banning all forms of 'pagan' sports. Not until the end of the nineteenth century did more organised and sophisticated forms of sporting activity emerge.

### **Commercialization of sports and misusing of bureaucratic authority**

A major development in modern sports often linked with the appearance of structural doping use, is the commercialisation of modern sports. The enormous amounts of money going around in the business of sport make winning and getting in the spotlights even more important. Along with the internal desire to win, many athletes nowadays also face the pressure of the economic consequences of their success or failure. Therefore, we analyse the hypothesis that the commercialisation of sports contributes to a doping-prone environment. In this section, we focus on the economics of sports. We will explain why so much money is flowing into the world of sports (paragraph 3.1). In paragraph 3.2, we will focus on the important role of the media when it comes to these money flows. In paragraph 3.3, we will demonstrate how 'the invisible hand' of economics operates in the world of sports, and how it creates an increasingly uneven distribution of wealth among athletes and clubs.

Sport used to be a game. It has become a business. Dazzling amounts of money are going around in the world of professional sports. The number of sport millionaires has increased significantly. TV contracts of world class sporting events are worth billions of dollars. Sponsors offer large budgets to teams or individual athletes. In 1999, the European Press reported 574 sponsorship deals with an estimated value of 2.4 billion euro: an increase of more than 10% on the previous year and nearly four times as much as at the beginning of the decade (as figure 3.1 shows). Not only private sponsors put money into sport. Most governments sponsor/have sponsored sports for various reasons. Social cohesion

and a country's self esteem can be stimulated through successes in the world of sports. Medals and championships played an important part in the former communist countries, as well as in today's societies. The number of Olympic medals collected has become an indicator for a country's sport policy. Sport is an important item on many political agendas and many countries go to great lengths to create a medal-fertile sport environment by building infrastructure (stadiums) and offering financial support and rewards. But it is mainly the private sector that is responsible for the overwhelming increase in money flowing into the world of sports. Sponsoring and the selling of TV rights are the main sources of income for today's professional sports. The emphasis is often on TV money. The television rights for the 1998 World Championship Football were sold in 1988 for EUR 89 million. The rights for the 2002 World Championships generated ten times as much. The sports marketing company ISL and media tycoon Kirch paid EUR 0.9 billion. The rights for the 2006 World Championships sold in the same deal topped the scale at EUR 1.0 billion.

### **Money, Money, Money:**

The relationship between sport, on the one hand, and the sponsors, on the other, can be viewed as a relationship of mutual exchange. It's a case of supply and demand. Sponsors and TV stations are willing to invest in sports because it boosts their sales. For example, during Euro 2000, Carlsberg UK achieved a 773% sales increase in multiple grocers, a 307% overall take-home increase and overall sales increase of 48.2% (Rines, 2000). Kolah (1999) states that sport has enormous exploitable commercial potential. Firstly, sport has strong advertising effects: with the increasing number of television programmes, many viewers tend to change channels during advertisements. However, the viewer can hardly escape from the secondary advertising messages contained in a sports broadcast. Hence, sponsoring sport is a good way of making viewers aware of a product or company. For example, the 1998 World Cup sponsorship generated sponsor MasterCard an estimated media value of EUR 107 million, several times more than the EUR 17.5 million it had spent on the sponsorship. Secondly, sponsoring sport has an image effect: sport has the image of being youthful, dynamic, achievement-orientated and success-orientated.

### **Conclusion:**

By the turn of the 19th century, sport was reassuming a place similar to that which it held in Greek and Roman societies. Further advances in technology, combined with social, economic and political developments, influenced sports development during the twentieth century. Sporting activity has gradually evolved into a business providing a significant, worldwide source of entertainment, revenue and employment. Sport has also developed into a significant social institution and succeeding in sport has become highly valued. It looks like this development has placed pressure on athletes to become not just successful, but the best. This social and commercial pressure has probably contributed to the escalation in the number of drug cases.

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## Common Wealth Games

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### Introduction:

The history of sports in India dates back to the Vedic era. Physical culture in ancient India was led by a powerful fuel religious rites. The golden history of sports in India is also evident in the immortal epics like Ramayana, Mahabharatha etc., where as during the period of Ramayana; hunting, archery, horse riding, swimming were the royal games. Mahabharatha made mark in the sports like dicing, gymnastics, wrestling, chess (Shatranji) and gilli danda. Puranas mention about the threatening game of rope fighting. The archeological excavation of Harappa and Mohenjadarro along with religious manuscripts like puranas and Vedas are the standing testimonials of the glorious history of Indian sports. The Ministry of Youth Affairs and Sports was initially set up as the Department of Sports in 1982 at the time of organization of the IX Asian games in New Delhi. Its name was changed to the department of youth affairs sports during the celebration of the international youth year, 1985. It became a ministry on 27<sup>th</sup> May, 2000. Subsequently, the ministry has been bifurcated its department of youth affairs and department of sports under two separate secretaries w.e.f. 30<sup>th</sup> April 2008. the specific subjects being dealt with by these two departments are contained in the order of the Govt. of India (allocation of business) rule, 1961. Englishman Astley Cooper was responsible for the games concept it was he who proposed of a sporting contest amongst the countries of the British Commonwealth way back in 1891. Writing for a magazine, cooper suggested a festival combining sporting military and literary events that would draw closer the ties and increase the good will and understanding of the British Empire.

### COMMON WEALTH GAMES 'the Friendly games

The Common Wealth Games is an international multi-sport event involving athletes from the Common Wealth of Nations. The event was first held in 1930 and takes place and every four years. It was initially known as the British Empire Games and was renamed to the British Empire and Common Wealth Games in 1954 and British Common Wealth Games in 1970 and assumed the current name of the Common Wealth Games in 1978. The Common Wealth Games is a sporting event staged between the elite athletes of Countries from the Common Wealth. It is held every 4 years and is conducted over many sports, in a format much like the Olympic Games.

The Common Wealth Games attracts the top athletes of members' nations of the Common Wealth, thus making it a World class competition. Secondly only to the Olympic games in many people's opinion. The Common Wealth Games are unique in the world of sports as it is based on a historical linkage of Common Wealth Countries not based on geographical features such as Asian, Pan American and African games or based on climatic conditions such as the Winter Olympics. The games are also unique as it shares a common language. Unlike Olympic games, as all the athletes and official can speak with each other in English, creating an atmosphere that has led to the Common Wealth Games being along known as the 'Friendly games'. are 54 members of the Common Wealth of Nations. 71 teams participate in the Common Wealth Games as a number of British Overseas territories, crown dependencies, and island states compete under their own flag. The Four nations of the United Kingdom – England, Scotland, Wales and Northern Ireland – also send separate teams.

The Empire Games flag was donated in 1931 by the British Empire Games Association of Canada. The year and location of subsequent games were added until the 1950 games. The name of the event was changed to the British Empire and Common Wealth Games and the Flag was retired as a result.

- From 1930 to 1950, the parade of nations was led by a single flag bearer carrying the union flag.
- Since 1958, the Queen's Baton Relay has taken place in which athletes carry a baton from Buckingham palace to the games opening ceremony. This baton has within it Queen Elizabeth II's message of greeting to the athletes. The baton's final bearer is usually a famous sporting personage of the host nation.
- All other nations march in English alphabetical order, except that the first nation marching in the parade of Athletes is the host nation of the previous games, and the host nation of the current games marches last. In 2006 countries marched in alphabetical order in geographical regions. Three national flags fly from the stadium on the poles that are used for medal ceremonies – previous host nation, current host nation, next host nation.

There are a total of 21 sports (with two multi-disciplinary sports) and further seven para sports which are approved by the Common Wealth Games Federation. Core sports must be included in each programme. A number of optional sports may be picked by the host nation, which may include some team sports such as basketball. Recognized sports are sports which have been approved by the CGF (Common Wealth Game Federation) but which are deemed to need expansion. Host nation may not pick these sports for their programme until the Common Wealth Game Federation are fulfilled.

XIX Common Wealth Game India host the CWG in New Delhi (Oct 3 – 14 Oct. 2010)

Mascot: Shera, A Royal Bengal Tiger the most is mascot is depicted wearing a white sporting Jersey and blue shorts. The Royal Bengal tiger is the national Animal of India. The mascot embodies values that the Indian nation is proud of majesty, courage, power and grace.

### **Common Wealth Games Delhi, 2010**

The Common Wealth Games (CWG) a mega and a multi disciplinary event, was successfully organized at Delhi from 3<sup>rd</sup> to 14<sup>th</sup> October, 2010. The competitions were held in 17 sports and 7572 athletes/coaches/ officials from 71 countries participated in these games. The opening and the closing ceremony were held at Jawaharlal Nehru Stadium, the flagship stadium for the CWG.

The performance of the Indian contingent at the Common Wealth Games was quite exceptional, resulting in an unprecedented haul of medals, which were than double the medals India had won at last Common Wealth Games held at Melbourne, is 2006.

The results have created a euphoric environment is the Country and no doubt raised the hopes and expectations of the people for greater success in the future. This dramatically improved performance by the Indian sports persons has been a result of the intensive training provided to them over the past this and a half years under the scheme for preparation of Indian teams for Common Wealth Games. This scheme had been conceptualized and formulated, with the objective of achieving excellence in multi disciplinary sports events.

## **Comparative Effects Of Slow Continuous Running And Interval Running Methods On Maximal Oxygen Uptake**

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**Introduction:**Maximal Oxygen uptake is the maximum rate at which oxygen can be consumed per minute. It has been observed that for doing efficient muscular work the body needs high supply of oxygen and side-by-side more amount of energy supply, The efficiency of an individual in performing physical activities depends basically on cardio-respiratory changes and training results in development of the cardio-respiratory efficiency. Through endurance training the efficiency of the circulatory and respiratory systems is improved, maximal oxygen uptake is increased, stroke volume and cardiac output are increased, ventilatory efficiency is improved, lung volumes become larger and diffusion capacities increase. Sherman (6), Hudder (3), Swedburg (8), Buccola and Stone (2), Brown, Harrower and Deeter (1), and Kind (4), in their recent studies have shown that continuous running significantly improves maximal oxygen uptake. Webb (6), Swedburg (8), and Robert (5), in their studies contended that training using interval running method significantly improves maximal oxygen uptake.

**Methodology :**Sixty students studying in tenth and eleventh standards of the Kendriya Vidyalaya, Hyd were selected at random as subjects for the study. It was ensured from the health examination records of the subjects maintained as a part of the regular school procedure that all the subjects were medically fit for going through the experimental requirements of this study. The average age of the subjects was sixteen years, ranging between fifteen and seventeen years. The subjects were at random assigned to two experimental and one control groups, each group consisting of twenty subjects. The experimental groups were slow Continuous Running Group (Groups) and Interval Running Group (Group I). The test for measuring maximal Oxygen Uptake was conducted in the Research Laboratory of the Osmania University College of Physical Education, Hyderabad, applying indirect method with the help of bicycle ergometer. Each subject was given practice in synchronizing their frequency of pedaling with the beats of metronome, first without any resistance and then with resistance. The metronome was set at 100 beats / minute to allow one beat for each cycle of pedaling at the rate of 50 cycles / minute. The load on the ergo meter was set at 450 Kg. M/Minuter to produce a heart beat rate between 125 and 170 per minute for each subject. At the signal 'go' the subject started pedaling and simultaneously a stop watch was started. Heart rate was taken at the last half of every minute for a six minute work bout by the method of palpation at the carotid artery applying light finger pressure. The mean heart rate recorded in the fifth and sixth minutes was used as the working heart rate achieved in the fifth and sixth minutes using nomogram prepared by Astrand and Rhyning. The Maximal Oxygen Uptake in litres per minute of a subject was divided by his body weight in kilograms to normalize his maximal oxygen uptake for his body size. The final score of the test was in ml. of O<sub>2</sub> / Kg / minute. The measurement of experimental variable was done at the beginning and after an experimental period of ten weeks. A progressive training programme of Slow Continuous Running and Interval Running was prepared by the research scholar and administered to the respective groups during the experimental period. The subjects were trained thrice a week i.e. on Mondays, Wednesday and Fridays. For testing the mean differences of the two experimental groups and a control group and to find out the differential effects of the treatments using an analysis of variance, the level of significance was set at .05 level of confidence.

**Results and Discussion :**The mean differences between the initial and final scores for the two experimental and one control groups were tested by 't' test for finding the significance of differences shown by the groups during the experimental period of ten weeks. The mean differences for the criterion measure for the three groups in this study are presented in table I.

**TABLE I**  
**Significance Of Differences Of Means In Maxi Mal Oxygen Uptake Of The Slow Continuous Running Group (S), Interval Running Group (I), And Control Group (C).**

Group	Mean $\pm$ S.D.		Mean Difference	't' ratio
	Initial	Final		
S	54.49 $\pm$ 9.02	61.99 $\pm$ 8.82	7.50	20.83*
I	57.05 $\pm$ 8.35	64.39 $\pm$ 8.34	7.34	20.42*
C	58.99 $\pm$ 11.62	58.93 $\pm$ 9.37	0.06	0.18

\* Significant at .05 level of confidence.

t needed for significant at .05 level with 19 degrees of freedom is 2.09.

Table I reveals that as a result of endurance training using Slow Continuous Running and Interval Running Methods, Maximal Oxygen increased significantly whereas in the case of control group difference in the initial and final means was not found significant. Since both the experimental groups have shown significant increase in Maximal Oxygen Uptake, the mean gains or losses of the two experimental and one control groups were further subjected to F test to determine inter group variability. The relating to this is presented in Table 2.

**TABLE 2: Analysis Of Variance Of The Mean Differences Of The Slow Continuous Group (C), Interval Running Group (I), And Control Group (C) In Maximal Oxygen Uptake**

Source of Variation	df	Sum of squares	Meae square (variance)	F value
Between means	3	824.0108	274.6702	
With in groups	76	191.1842	2.5156	109.19*

\* Significant at .05 level of confidence. F value to be significant at .05 level with 3 and 76 degrees of freedom is 2.73. Analysis of data in Table 2 shows that the two experimental and one control groups have differential effects in increasing Maximal Oxygen Uptake. Therefore to find out which of the differences of mean gains or losses amongst the groups were statistically significant the Scheffe Test was applied. The data pertaining to this is presented in Table 3.

**TABLE 3: Significance Of Differences Of Means Gain Of Slow Continuous Group (S), Interval Running Group (I), And Control Group (C) In Maximal Oxygen Uptake.**

Groups compared	Mean diff.	S.E.	't' Value
S.I.	0.149	0.5	0.298
S.C.	7.559	0.5	15.118*
I.C.	7.41	0.5	14.82*

\* Significant at .05 level of confidence.

t needed for significant at .05 level is 2.86.

The analysis of variance and application of Scheffe Test show that mean gains made by the Slow Continuous Running and Interval Running Groups were significantly higher than that of the control group, there being no significant difference in the mean gains made by the two experimental groups.

**Discussion :**

Maximal Oxygen Uptake increased significantly as a result of endurance training using Slow Continuous and Interval Running methods. Control group did not show any significant gains. There was no statistically significant difference between the two experimental groups.

Measurement of Maximal Oxygen Uptake is now commonly used to evaluate the oxygen transport system of the body. The possible cause to which this increase in Maximal Oxygen Uptake can be attributed is that endurance training increases the capacity of the skeletal muscle to break down glycogen to C<sub>02</sub> + H<sub>20</sub>. As a result of this, the capacity of the muscle to generate energy aerobically is improved probably by

an increase in mitochondrial function. In addition the increase in  $V_{O_2}$  Max. may be aided by improved oxygen diffusion capacity in the lungs and increased cardiac out-put as a result of endurance training. The research findings of Staudacher (7). Webb (9), Swedburg (8), and Sharman (6) agree with the conclusion drawn in this study.

#### **Conclusion :**

1. Slow Continuous Running and Interval Running Methods are effective in improving Max. Oxygen Uptake.
2. Slow Continuous Running and Interval Running Methods have equal training effect in improving the Maximal Oxygen Uptake. The control group did not show any significant change in Maximal Oxygen Uptake.

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## Circuit Training For Strength Endurance

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**Introduction:**Endurance like strength is a conditional ability. It is primarily determined by energy liberation process. 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. Harre (1986) defines endurance as the ability to resist fatigue. Endurance is the ability to do sports movements with the desired quality and speed under the conditions of fatigue.

Circuit training is a very popular and effective variation for the improvement of endurance. In circuit training several exercise are done one after the other. Completing of one set of each exercise in rotation is called one round. There are normally three or more rounds in circuit training. In circuit training there are generally 5-12 exercises. Circuit training is a form of conditioning combining resistance training and high-intensity aerobics. It is designed to be easy to follow and target strength building as well as muscular endurance. It was first proposed in the late 1950s as a method to develop general fitness by Morgan and Anderson a circuit format of nine to 12 stations. The initial routines were arranged in a circle, alternating between difference muscle groups by allowing only a short rest interval of 30-90 seconds, without recovery and with recovery between the exercises. Circuit Training is a form of Strength and endurance training that can improve strength, speed and endurance. Circuit training stations are generally sequenced in a way to alternate between muscle groups, which allows for adequate recovery. The rest interval between stations should be between 30-90 seconds and 1-3 min between the circuits. Circuit Training benefits for weight loss, building the muscles of the body, developing strength and endurance, feel good etc.A good circuit training course works the different sections in the body individually. An example of a circuit may be of the following exercises.

### **Upper-body**

- Press ups , Bench dips, Pull Ups, Medicine Ball Chest Pass, Bench Lift, Inclined Press

### **Core & trunk**

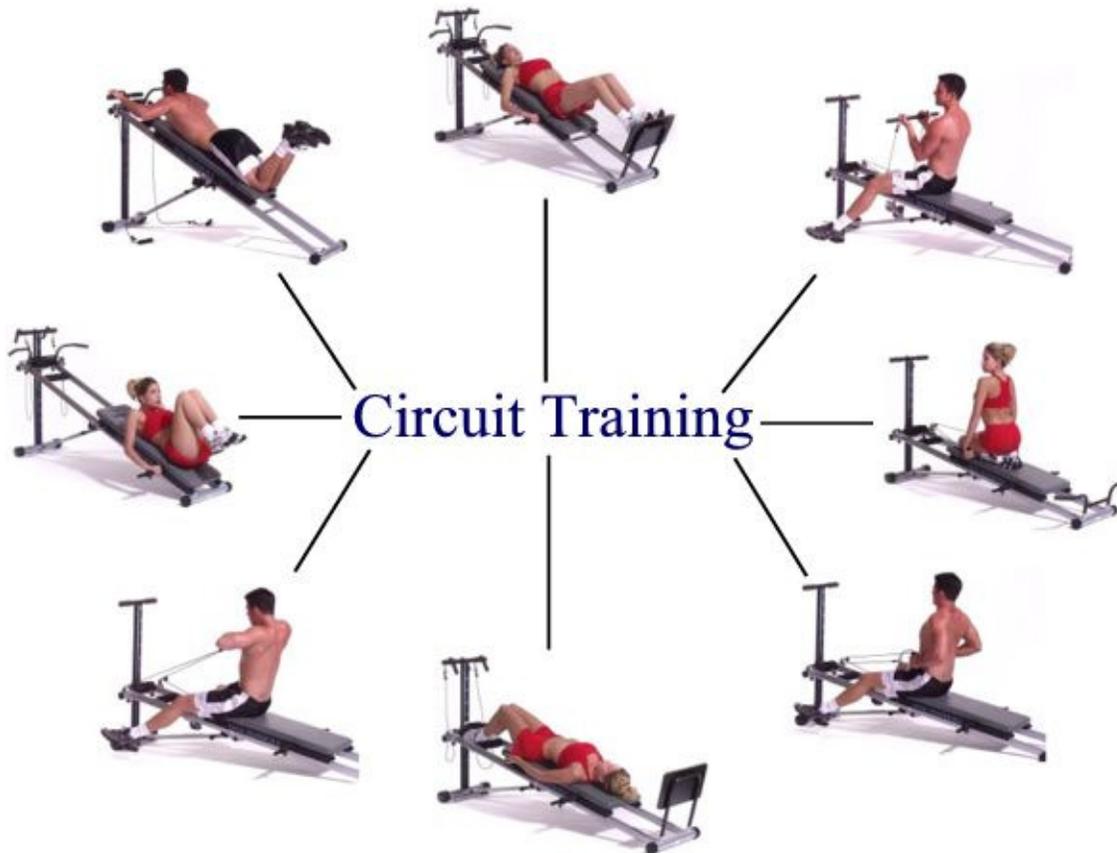
- Sit ups, Stomach Crunch, Back Extension

### **Lower-body**

- Squat jumps, Compass jumps, step ups, shuttle run, bench squat,

## Total-body

- Burpees, skipping, squat thrusts, treadmills



Sample of Circuit Training Exercises.

**Discussion:** Circuit Training is the best suitable for development of strength endurance. The following are the benefits of Circuit Training. May be easily structured to provide a whole body workout. May not require expensive gym equipment. Participants normally work in small groups, allowing beginners to be guided by more experienced individuals, as well as benefiting from the supervision of the instructor. Can be adapted for any size workout area. Can be customized for specificity; easy to adapt to your sport.

### **Recommendations:**

It is suggested that Circuit Training exercises can be included in regular schedule of long distance athletes for improvement of endurance.

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**A Comparative Study Of Speed Among Forward foot ball Players And Defending Foot Ball Players  
Of Hyderabad District In Andhra Pradesh**

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**Abstract:** The aim of the present study is to compare the speed among Forward Foot Ball players and Defending Football players of Hyderabad. 20 male Forward football players and 20 male Defending football players of Hyderabad were taken for the study. The 30 Meters Run test is used to measure the speed among Forward foot ball players and Defending foot ballplayers. This study is limited to male Foot Ball Players of Hyderabad. This study shows that the Forward football players are having good speed compare to Defending foot ball players.

**Key words:** Speed, Forward foot ball Players, Defending foot ball Players etc.

**Introduction:**

The game of football is any of several similar team sports of similar origins which involve advancing a ball into a goal area in an attempt to score. Many of these involve kicking a ball with the foot to score a goal, though not all codes of football using kicking as a primary means of advancing the ball or scoring. The most popular of these sports worldwide is association football, more commonly known as just "football" or "soccer". Unqualified, the word *football* applies to whichever form of football is the most popular in the regional context in which the word appears, including American football, Australian rules football etc.

The football is any of several similar team sports of similar origins which involve advancing a ball into a goal area in an attempt to score. Many of these involve kicking a ball with the foot to score a goal, though not all codes of football using kicking as a primary means of advancing the ball or scoring. The most popular of these sports worldwide is association foot ball more commonly known as just "football" or "soccer". Unqualified, the word *football* applies to whichever form of football is the most popular in the regional context in which the word appears, including American football, Australian rules football etc.

**Statement of the problem:** To find out the speed among Forward foot ball players and Defending foot ball players of Hyderabad District.

**Sample:** The sample of the present study consists of 20 Male Forward football players and 20 male Defending football players between the age group of 18 to 21 years of Hyderabad District.

**Tool:** 30 Meter Run is used to collect the data for speed.

**Limitation:** The study is limited to 20 Male Forward Football players and 20 male Defending football Players of Hyderabad.

**PROCEDURE OF DATA COLLECTION:**

**Name of the test:** 30 Meters Run.

**Purpose:** To determine the speed among Forward and Defending football players.

**Equipment:** Measuring tape, stopwatch, cone markers, flat and clear surface of 30 Meters.

**Procedure:** The Forward and Defending football players are made to run 30 Meters in each batch of two members. The players have to stand behind the starting line. The strong leg of the player should be front and behind the starting line. On the whistle, each set of two players has to run fast as possible through the finish line. Like these 20 sets has to finish the test as same above. The timing is taken by qualified officials. The test is conducted at O.U. Grounds

### Result and Discussion:

Table-1 is showing the speed among the forward line and defending line hockey players.

30 Meters Run	N	Mean	SD	SE	t	df	Sig(2-tailed)
Forward football players	20	4.37	.25942	.0581	-13.067	38	.000
Defending football players	20	5.51	.29213	.6532			

The average speed of Forward football players is 4.37 compare to Defending football players is 5.51. There is significant difference of 0.14 seconds between Forward and Defending football players. The area of run in Forward line football players is 3000-4000 Meters approximately in the duration of match (45+5+45). The Defending players may run 2000-2500 Meters approximately in the duration of the match. The Speed of the forward football Players are good compare to defending football Players. In 90 Min Match the forward players run between 40 to 50 Min compare to the defending football Players between 30 Min to 40 Minutes.

### Conclusion:

It is concluded that, the Forward football players have good speed compare to the defenders players in football

**Recommendations:** Speed training must be given to all positions of football players including goalkeeper to enhance the performance. Similar studies can be conducted on football players also.

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## **The effect of selected physical fitness variables on swimming performance of different age group swimmer**

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### **ABSTRACT**

Physical fitness is one of the facts of a person's all round harmonious development. Physical fitness is the cultural phenomenon of great complexity and magnitude, which is historically, preconditioned level of health and comprehensive development of a person. Aim of the study was to study the effect of selected physical fitness variables on swimming performance of different age group swimmer. For this investigation, the investigator has taken total 100 male, between the age group 13 to 19 years and 20 to 26 years, selected on random basis, as per level of their participated swimming competition level. AAHPER- youth physical fitness test revised (1970) test were employed as tools for collection of data. For Comparison statistical analysis was done by calculating mean, standard deviation and 't' value through SPSS package. It was concluded that the two groups significantly differ on the five variables/ components of physical fitness namely pull up, sit up, shuttle run flexibility, endurance. 20-26 years age group have more effect of physical fitness on their swimming performance compare than to 13 to 19 years age group.

### **INTRODUCTION**

"**A sound** mind in a sound body" is a good dictum that has stood the best test of time. There have been a number of studies tending to shows that mind and body are inseparable. Ancient thinkers of Greek, Aristotle, combined moral intellectual and physical excellence. At Athens an uneducated body was as much a disgrace as an untrained mind. Physical fitness is one of the facts of a person's all round harmonious development. Physical fitness is the cultural phenomenon of great complexity and magnitude, which is historically, preconditioned level of health and comprehensive development of a person. Physical fitness adds grace to the young, wealth to the poor, ornament to rich and acts as a consoling factor to the old.

The place of Physical fitness in any society reflects something of that society's characteristics. Today almost every country in the world gives importance to development of sports in order to improve the nation's health and for the well being of the future generation Every individual must know the importance of Physical fitness in other words one must have a fundamental knowledge of anatomy and physiology This fundamental knowledge enables person to understand Physical fitness

### **AIM OF THE STUDY**

The effect of selected physical fitness variables on swimming performance of different age group swimmer.

### **OBJECTIVES OF THE STUDY**

To study the effect of selected physical fitness variables on swimming performance of different age groups.

### **Hypothesis of the study**

There is a significant effect of selected physical fitness variables on swimming performance of different age group swimmer.

### **METHODOLOGY**

For this investigation, the investigator has taken total 100 male swimmer between the age group 13 to 19 years and 20 to 26 years, selected on random basis, as per level of their participated in swimming competition. Physical fitness test were employed as tools for collection of data. For Comparison statistical

analysis was done by calculating mean, standard deviation and 't' value. .

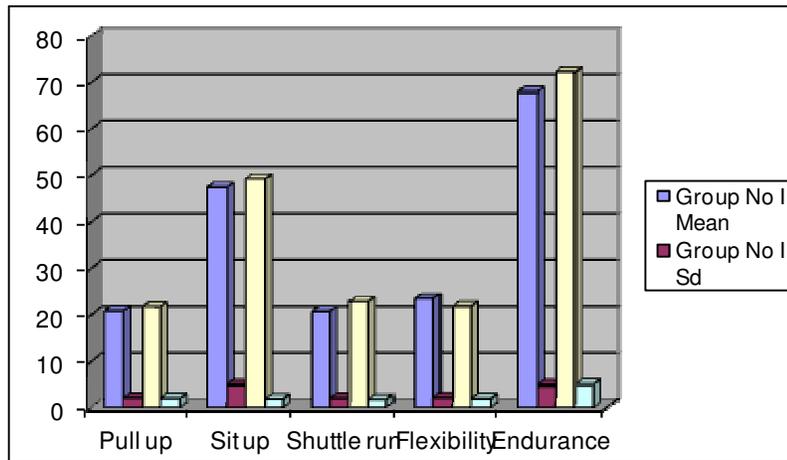
**Table 1:Mean, SD for various physical fitness components of variables on swimming performance of 13 to 19 years and 20-26 years age group swimmer**

Physical fitness	13-19 years		20-26 years		't'
	Mean	Sd	Mean	Sd	
Pull up	20.86	2.08	21.73	2.0	2.14*
Sit up	47.27	4.86	49.20	1.83	3.05**
Shuttle run	20.72	2.01	22.93	1.72	3.34**
Flexibility	23.58	2.09	21.82	1.90	2.47*
Endurance	67.94	4.80	72.32	4.92	3.74**

\*Significant at 0.05 level\*\*Significant at 0.01 level

The above table shows that all two groups significantly differ on five variables of physical fitness namely sit up, shuttle run, flexibility and endurance at 0.01 level of significance except pull up where level of significance was found at 0.05 level of significance. This indicates that physical fitness level is directly related to performance level

**Graph I**



### Conclusion

It was concluded that the two groups significantly differ on the five variables/ components of physical fitness namely pull up, sit up, shuttle run flexibility, endurance two groups and 20-26 years age group have more effect of physical fitness on their swimming performance compare than to 13 to 19 years age group. Further results of study concluded that physical fitness and psychological make up are most important for sports behavior and at the same time highlights certain physical and psychological qualities which have threshold role in development of sportspersons and their optimum performance.

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## A study of pre and post-competitive anxiety level of inter-university volleyball players

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### Abstract

The present study compares the pre-competitive and post-competitive anxiety in inter-university volleyball players. A group of 30 players (15 of each sex with age group of 18-25) were selected from Hyderabad, A.P., India through purposive sampling technique. Data were collected from athletes using a Sports Competitive Anxiety Test. The result of the study reveals that there was significant difference in 0.01 levels of pre-competitive anxiety and post-competitive anxiety among the male and female inter-university volleyball players.

**Keywords:** Volleyball players, anxiety, SCAT, sports, Interuniversity.

### Introduction:

It has been recognized for many years that psychological factors, in particular anxiety, play an important role in competition. Competitive sports can make even the world's most successful athlete feel nervous. Many factors such as expectations, perfectionism, fear of failure, lack of confidence induce feelings of anxiety in athletes. In sport psychology, anxiety refers to an unpleasant emotion which is characterized by vague but persistent feelings of apprehension and dread. Anxiety consists of two subcomponents, namely cognitive and somatic anxiety, which influence performance before and during competition. Meanwhile, cognitive is the mental component, which is characterized by negative expectations about success or self-evaluation, negative self-talk, worry about performance, images of failure, inability to concentrate, and disrupted attention. The somatic is the physiological element which is related to autonomic arousals, and negative symptoms such as feelings of nervousness, high blood pressure, dry throat, muscular tension, rapid heart rate, sweaty palms, and butterflies in the stomach. Sport is littered with the broken dreams of those who wavered when they most needed to be in control of themselves and focused on the task at hand. When a competitor 'freezes' in the big moment or commits an inexplicable error, anxiety, in one of its many guises, is very often the root cause. The precise impact of anxiety on sporting performance depends on how you interpret your world. Unfortunately, far too many athletes accept high levels of anxiety as an inevitable part of the total sporting experience and fail to reach their potential.

**Material and Methods** To achieve the purpose of the study a group of 30 volleyball players (boys=15 and girls=15) were selected from Hyderabad, A.P., India through purposive sampling technique. Their age ranged from 18 to 25 years.

Sports Competition Anxiety Test - (SCAT), an evaluation that measures the competitive anxiety levels of athletes, was used to measure the anxiety level of volleyball players. The test consists of fifteen items which include 5 spurious items, 8 positive items and 2 negative items. The odd-even reliability of the test in the present study was found to be .80. The lowest possible score on this test and the highest possible score is 27. A low score indicates higher anxiety and a high score indicates low anxiety. The t-test was used to test the effect of anxiety level between pre and post completion. The significance level was determined as  $p < 0.01$ .

Table1 The pre-competitive and post-competitive anxiety of inter-University male volleyball players

Group	Mean	Variance	df	't' value
Pre competitive anxiety	24	7.29	14	7.01*
Post competitive anxiety	19.47	7.84		P>0.01

*\*significant at 0.01 level*

### Results

Table 1 reveals that the mean scores of pre competitive and post competitive anxiety of inter university male volleyball players are 24 and 19.47 respectively. The t-value is 7.01 which were significant at 0.01 level of confidence which indicates that there is significant difference between the 2 groups.

Table 2. The pre-competitive and post-competitive anxiety of inter-University female volleyball players

Group	Mean	Variance	df	't' value
Pre competitive anxiety	23.13	7.12	14	8.60
Post competitive anxiety	18.80	3.89		P>0.01

*\*significant at 0.01 level*

The inspection of Table 2 indicates the mean scores of pre competitive and post competitive anxiety of inter university female volleyball players are 23.13 and 18.80 respectively. The t-value is 8.60 which was significant at 0.01 level of confidence.

### Discussion

Most psychologists believe that the highest level of competitive anxiety will deteriorate athletes' performance in sport. On the contrary, a lower level of anxiety was found to have enhanced the performance of athletes. In sports, higher levels of anxiety before any competition can deteriorate performance. On the other hand, athletes with low levels of skill, like those whose highest achievement is taking part in school or university competitions, normally experience higher levels of competitive anxiety. Meanwhile, those athletes whose highest achievement is taking part in national or state level competitions, experienced low levels of anxiety. It is very common that low level skilled. In the present study the pre competitive anxiety was higher than the Post competitive anxiety in inter college female volleyball players. The findings supported by Evans who examined the acute response of female volleyball players and anxiety to competitions.

The results of the study were that pre competitive level of anxiety in inter college volleyball female players is high and post competitive anxiety in inter college volleyball female player is low. In male inter college volleyball players the pre competitive level of anxiety was higher than post competitive anxiety and the findings are in supportive of previous reports

### Conclusion

The present study has certain limitations that need to be taken into account when considering the study and its contributions. Since the level of anxiety after the competition is not related to the athletes' performance, this study merely focused on the level of anxiety pre and post competitions only. Based on the current results, it is recommended that sport psychologists, sport counselors, and coaches use the findings to design appropriate training programmers to help athletes acquire suitable coping strategies so as to reduce their anxiety levels and enhance their performance.

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## A Critical Study on Talent Identification among School Children

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### ABSTRACT

Sports,Talent identification has been used with varying degrees of success. Talent identification has generally not been very reliable in predicting the future success of junior Sportsmen (mainly due to varying growth patterns) and for sports which rely heavily on other factors such as technique, tactics and psychological factors. The main purpose of the study was to critically identify the talent in school children.**Method** : 168 girls of were selected as subjects for the study. The age of the students was between 11 to 14 years and they were divided into 4 groups. Eight motor variables were selected for the study and they were Body composition, Explosive strength, Flexibility, Strength endurance, Muscular strength, Speed, Agility and Endurance. The test items selected were Height, Weight, Vertical jump, Bend and reach, Sit-ups one minute, 1 kg medicine ball throw ,30 mts flying start, 6X10M shuttle run and 800 mts run for the above variables. The talent identification program related to Physical Fitness Test as developed by Sports Authority of India was used for the study. **Results** : The results showed that majority of the students showed poor performance in the battery of tests. Percentage of students getting 10 points is almost negligible. There was some satisfactory performance in the area of strength, strength endurance and flexibility when compared to speed, endurance and agility. **Conclusion**: It was concluded that the majority of students showed poor performance in all the test items of the study specially in speed, endurance and agility. But thee were some satisfactory performances in the area of strength, strength endurance and flexibility.

**Key words** : Talent identification,technique, tactics, psychological factors.

**Introduction:** In the present scenario of Sports,Talent identification has been used with varying degrees of success. Talent identification has generally not been very reliable in predicting the future success of junior Sportsmen (mainly due to varying growth patterns) and for sports which rely heavily on other factors such as technique, tactics and psychological factors. However, being a successful athlete in any sports, is a result of a multitude of factors and it is highly difficult to test them totally. In addition to the physical and physiological attributes which usually make up a talent identification process, other factors such as motivation, determination, positive attitude, ability to learn and perform skills are all important. Finding potential athletes is one of the important thing in the sporting arena. The success of a talent identification program depends on getting the athlete into the best training program, support system and onto a sport career pathway to the elite level.

A general non-sport specific testing battery can provide an idea of a person's basic strengths and weaknesses and can be matched to sport which makes the best use of their strengths. What ever may be the approach; the talent identification process should identify the talent and give scope for prediction of future development success. There are three common approaches to athletic talent identification. 1.Systematic, Governmental Systems: These are methods commonly used by former Soviet countries, China and a limited number of others. These systems use methods over a long period of time such as that mentioned earlier.2. Systematic, Non-Governmental Systems: This is the most common form of athletic talent identification. It involves sporting bodies, companies and individual teams looking at children in many different contexts and recruiting based on a complex number of issues such as sociology, economic factors, attitude, physical ability, technical proficiency and more. 3..Non-Systematic Approaches: These approaches are far less formal and don't involve using a specific method across the board. This sort of athletic talent identification occurs in highly popular sports where there is high participation and there is no need to recruit fresh from those who don't currently participate.

In India it is a combination of all the three systems. The Government, through Sports Authority of India schemes identifies the talent and trains them in their centers. On the other hand some of the voluntary organizations and sports associations identify the talent for their respective sports organizations. The main purpose of the study was to critically identify the talent in school children.

**Method :**

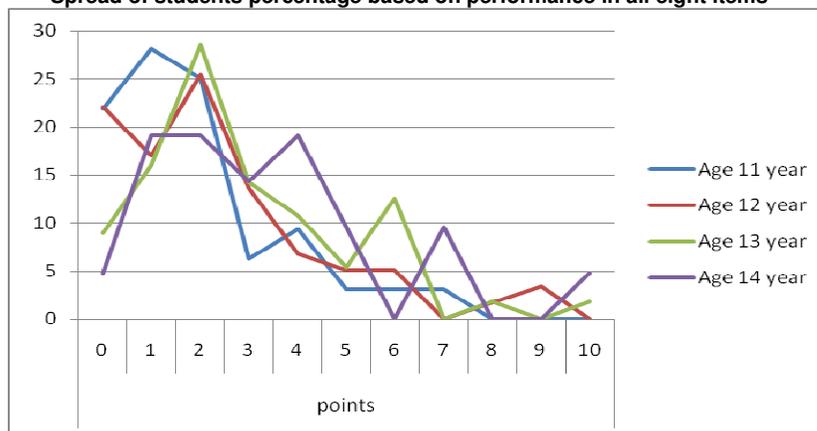
A total number of 168 girls of ZP High School, Venigalla, Guntur District were selected as subjects for the study. The age of the students ranged between 11 to 14 years and they were divided into 4 groups. Eight motor variables were selected for the study and they were Body composition, Explosive strength, Flexibility, Strength endurance, Muscular strength, Speed, Agility and Endurance. The test items selected were Height, Weight, Vertical jump, Bend and reach, Sit-ups one minute, 1 kg medicine ball throw ,30 mts flying start, 6X10M shuttle run and 800 mts run for the above variables. The talent identification program related to Physical Fitness Test as developed by Sports Authority of India was used for the study. The Physical fitness testing consisted of three broad components of fitness : 1) aerobic capacity, 2) body composition, and 3) muscular strength, endurance and flexibility. The third component was further divided into three areas: abdominal strength and endurance, upper body strength and endurance, and flexibility. SAI adopted conversion table consisting of four points scores, i.e. 0 points (poor), 1 point (satisfactory), 2 points (good), and 3 points (excellent) was used to convert the performance into points to compare the performance with the norms.

**Table 1**  
**Spread of percentage of students based on the total points scored in all eight tests**

Points	11 year (%)	12 year (%)	13 year (%)	14 year (%)
0	22	22	9	5
1	28	17	16	19
2	25	25	29	19
3	6	14	14	14
4	9	7	11	19
5	3	5	5	10
6	3	5	13	0
7	3	0	0	10
8	0	2	2	0
9	0	3	0	0
10	0	0	2	5

Table 1 shows the talented subjects in all age groups. Out of 24 maximum scoring points the subjects secured only 10 as their maximum point, hence this was taken as the maximum performance point and 1 as their lowest rate of performance. All the subjects were sorted according to their talented levels and depending upon their performance the points were allotted . Only two subjects were identified as highly talented under the age groups of 13 years & 14 years

**Graph 1**  
**Spread of students percentage based on performance in all eight items**



The data in the above table very clearly indicates that majority of the students showed poor performance in the battery of tests. Percentage of students getting 10 points is almost negligible. The data indicated that there was some satisfactory performance in the area of strength, strength endurance and flexibility when compared to speed, endurance and agility. The components, which are needed for to day to day physical work are showing some satisfactory level where as the other components like speed, endurance and agility are almost touching the rock bottom. This result indicates that there was a need to have a structured physical education program for overall development of students.

### **Conclusions:**

It was concluded that the majority of students showed poor performance in all the test items of the study. It was also concluded that there were some satisfactory performances in the area of strength, strength endurance and flexibility.. Further it was concluded that components like speed, endurance and agility showed the least performance in the study.

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**An analysis of 100mts stride frequency and stride length of Physical Education  
Trainees  
in Acharya Nagarjuna University**

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**ABSTRACT**

The main objective of any athlete is to cover the distance in least possible time. The speed at which the athlete runs is equal to the product of two factors i.e. 1. Stride length and 2. Stride Frequency. Stride length means the distance covered in each stride and stride frequency is the number of strides taken in a given time. The purpose of the study was to know the stride length and frequency of the physical education trainees. The main purpose of the study was to know the stride length and frequency of the physical education trainees. **Method** : Fifty M.P.Ed students were taken as subjects. 100mts lane was marked and it was divided into five zones with a span of 20mts. 15 timers took the time at the end of each zone. i.e. 20mts, 40mts, 60mts, 80mts, and 100mts. 10 testers measured the stride length in the middle of each zone (two testers in each zone). Eight testers were employed to count the number of completed strides in each zone. (One each for each zone) and three for the total 100mts. Each student was asked to run with the starters gun sound and complete the 100mts at their full speed. Middle time of the three watches was recorded. **Results**: The results showed that the subjects have attained the maximum speed by the end of 40Mts. The subjects have got very short duration in the maintenance phase. The subjects have started decelerating very early phase when compared to elite Athletes. The overall stride length and stride frequency are less and the study suggests to incorporate technique training and the basics of the running strategies. **Conclusion**: It is concluded that subjects have lower levels of strength and power. It is also concluded that subjects had very short duration of maintenance of maximum speed phase. Further it is also concluded that the subjects the deceleration phase early and had less stride length and stride frequency.

**Key words**: Stride length, Stride frequency, speed,

**Introduction**: In running event, the objective of any athlete is to cover the distance in least possible time. The speed at which the athlete runs is equal to the product of two factors i.e. 1. Stride length and 2. Stride Frequency. Stride length means the distance covered in each stride and stride frequency is the number of strides taken in a given time. Studies have shown that optimal stride length is usually between 2.3 – 2.5 times the athlete's leg length. Stride frequency is the number of steps taken in a given amount of time or over a given distance. Stride length and stride frequency are important factors in designing the training for athletes.

Any athlete who wants to cover a distance in less time he should seek to improve stride length and stride frequency. The problems arises when increases one it effect the other component. For example, specifically trying to take longer strides will increase stride length but reduces stride frequency. Focusing on short quick strides increases stride frequency but reduces stride length. A study indicates that a very significant relationship existed between an athlete's standing height and his average stride length during 100mts race. Similarly a close relationship occurred between the athlete's leg length and the average stride length. A very close relationship existed between each of these same two measurements height and leg length and the average stride frequency. The average stride frequency decreased as the height and leg length of the athlete's increased. The main purpose of the study was to know the stride length and frequency of the physical education trainees.

**Method**:

Fifty first year M.P.Ed students were taken as a group as purposive sample. The oral consent of the students was taken to collect the data. Marking materials to mark 100mts track, starting Gun, stop watches (1/100 second precision). Steel tape to measure the distance and marking pins, Javelins were used for the test. 100mts lane was marked and it was divided into five zones with a span of 20mts. The total area in the lane was spread with white powder to enable the testers to mark the foot prints to measure the stride length. At the end of each zone, two javelins were planted one meter away from side line to form a visual line to check the torso clearance for the guidance of timers. 15 timers took the time at the end of each zone. i.e. 20mts, 40mts, 60mts, 80mts, and 100mts. 10 testers measured the stride length in the middle of each zone (two testers in each zone). Eight testers were employed to count the number of completed strides in each zone. (One each for each zone) and three for the total 100mts. Each student was asked to run with the starters gun sound and complete the 100mts at their full speed. Further they were asked to run in the middle of the lane. All the students ran with the running shoes and used only standing start. The timers were standing 10mts away, from the lane and clicked the time when the torso of the subject touched the perpendicular plane of the line by taking visual clue of javelins placed on each line. Middle time of the three watches was recorded. Testers meant for measuring the stride length were made to observe the foot prints at the middle of each zone and they have measured the length of the stride by placing two pins on farthest points of two foot prints in the running direction. Testers assigned for counting the strides in each zone were asked to count the foot contacts in each assigned zone. These testers were placed 10mts away from the lane. The testers assigned to count total strides in 100mts were placed 15mts away from the finish line and were asked to count the number of foot contacts before the end line.

**Results & Discussion:**

**Table 1: Details of the participants**

Details	Mean	Standard deviation
Age (years)	24.18	2.10
Standing Height (cms)	166.42	5.43
Sitting Height (Cms)	85.12	2.63
Leg length (Cms)	100.79	3.72
Foot length (Cms)	8.18	1.01
Weight (Kgs)	61.18	8.55

Table 1 describes the demographic data of the subjects chosen for the study. The average age of male students was 24.18years. The average height was 166.42 cms with a standard deviation of 5.43. The sitting height was 85.12with SD of 2.63 and leg length was 100.79 with a SD of 3.72. The foot length was 8.18 with a SD of 1.01 and the average weight was 61.18 with SD of 8.55

**Table 2: Details of 100mts speed, frequency and stride length of participants**

Details	Mean	Standard deviation
Performance in 100mts race	14.21	0.67
Stride length (mts)	1.89	0.04
Stride frequency (per second)	3.89	0.25

The following table gives the details of mean performance of subjects in 100mts race i.e, 14.21sec, average stride length is 1.89mts and the average stride frequency as 3.89 strides per second.

**Table 3: Distribution of speed**

	Details of Zone	Average Time	Standard deviation
Zone 1	First 20mts	3.64	0.14
Zone 2	20 to 40mts	2.55	0.19
Zone 3	40 to 60mts	2.53	0.20

Zone 4	60 to 80mts	2.74	0.32
Zone 5	80 to 100mts	2.76	0.29

The following table explains the average time and standard deviation of five zones of 100mts race. In the first zone, 0 to 20mts the subjects have taken more time because they are accelerating from the standing position. Hence the duration taken is more i.e 3.64. in the second zone they have attained the higher speed and the average time in this zone was recorded as 2.55 sec. In the third zone they attained the maximum speed and the average time in this zone was 2.53 sec. In the 4<sup>th</sup> and 5<sup>th</sup> zones they were deceleration phase and their speed was 2.74 and 2.76 sec respectively.

**Table 4: Distribution of stride frequency**

	Details of Zone	Average (strides per second)	Standard deviation
Zone 1	First 20mts	3.65	0.27
Zone 2	20 to 40mts	4.07	0.47
Zone 3	40 to 60mts	4.18	0.40
Zone 4	60 to 80mts	3.93	0.55
Zone 5	80 to 100mts	3.84	0.43

The following table explains the stride frequency of the subjects. The average of stride frequency and Standard deviation in five zones. In the first zone, the average stride frequency was 3.65 strides, In the second zone it was 4.07, in third zone 4.18, fourth zone 3.93, fifth zone 3.84. The data clearly indicates that the stride frequency has increased gradually from first to third zone and started declining from fourth to fifth zone.

**Table 5; Distribution of stride length**

	Details of Zone	Average SL (mts)	Standard deviation
Zone 1	First 20mts	1.79	0.09
Zone 2	20 to 40mts	1.93	0.12
Zone 3	40 to 60mts	1.90	0.11
Zone 4	60 to 80mts	1.90	0.12
Zone 5	80 to 100mts	1.90	0.11

The following table explains the distribution of stride length of 5 zones. In the first zone the average stride length of subjects was 1.79mts, in second zone it was 1.93mts third fourth and fifth zones was 1.90mts. the stride length has increased from first zone to second zone and then declined to 1.90 mts in the subsequent zones. The following graphs clearly indicates how the stride length changed from one zone to the other zone.

**Table 6: Average Speed**

	Details of Zone	Average speed	Standard deviation
Zone 1	First 20mts	3.64	0.14
Zone 2	20 to 40mts	2.55	0.19
Zone 3	40 to 60mts	2.53	0.20
Zone 4	60 to 80mts	2.74	0.32
Zone 5	80 to 100mts	2.76	0.29

The following table clearly indicates how the average speed varied in the five zones. In the first zone the average speed was 3.64 seconds, in second zone 2.55, third zone 2.53, fourth 2.74 and in fifth zone it was 2.76.

**Table 7: Average Distance covered in each second**

	Details of Zone	Average speed	Standard deviation
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Zone 1	First 20mts	5.5	
Zone 2	20 to 40mts	7.89	
Zone 3	40 to 60mts	7.96	
Zone 4	60 to 80mts	7.44	
Zone 5	80 to 100mts	7.32	

The following table explains the average distance covered by athletes in a second in each zone . in the first zone, the average distance covered by subjects in a second was 5.5 meters in second zone, it was 7.89, in third 7.96, in fourth zone 7.44 and in fifth zone it was 7.32.

The Data clearly indicates that the subjects have attained the maximum speed by the end of 40Mts. The International standard athletes will attain the maximum speed between 50 & 60 Mts, this can be attributed to the lower strength and power levels of the subject under this study. The subjects have got very short duration in the maintenance phase i.e., Maximum speed phase due to their inefficiency level when compared to elite Athletes. It indicates that the subjects need to undergo anaerobic training towards maximum speed. The subjects have started decelerating very early phase when compared to elite Athletes. This can be attributed to the fact that the subjects have to improve their anaerobic threshold level to reduce the deceleration phase. When compared the stride length of the athletes was less when compared to the elite athletes. Hence, there is a need to increase strength as well as flexibility of the subjects. The overall stride length and stride frequency are less and the study suggests to incorporate technique training and the basics of the running strategies.

**Conclusion:** It is concluded that subjects have lower levels of strength and power. It is also concluded that subjects had very short duration of maintenance of maximum speed phase. Further it is also concluded that the subjects the deceleration phase early and had less stride length and stride frequency.

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**“Nutritional status and awareness on nutrition to the Students (Boys) of the Bachelors of the Physical Education (B.P.Ed.,)”**

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**INTRODUCTION**

Athletes and sports are receiving increasingly global attention today. Among the crucial factors influencing athletic performance are physique & physical fitness and the conditioning (or) training received in that specific game and event. Even though genetic factors might have played a role in physical development. The external environment (which include the nutritional status) governs physique & physical fitness (All man; 1974) good diet is on that supports normal growth and development regulates metabolism, maintenance normal health study and provides adequate energy during training and competition (Michael; 1966) it is then obvious that for centuries athletes have been scorching for better diets which assumes then of attaining their peak performance during sports competition. As a result of an intense desire to be successful most athletes tend to attempt by trial and error method identification of one factor or combined factors will give them winning edge. (Wilmore; 1984). A number of minerals are require in the daily diet for the maintenance of health they include calcium, phosphorous, potassium, chlorine, magnesium, iron, sodium in such other important trace elements as manages, copper, iodine, cobalt, zinc, florin and others. They make up less than 5% of the body weight. The average daily requirement for calories the average individual receives approximately 45% of the carbohydrates, 40% from fat, and the remaining 15% from proteins. Fats contain the most available physiological energy. Since they supply 9.3k.cal/gm as compare with 4% for carbohydrates and 4% for proteins. Vitamins are another important class of Nutrition to essential for the maintenance of normal health & growth. The water soluble vitamins B&C play very important functional role and the fat soluble vitamins A; D, E, and K have their each significance in metabolic activities any deficiencies of vitamins & minerals in the diet reduce the performance of the individuals for physiologically and parenting diseases. The distribution of meals during the day is not critical and the proactive of these meals seems satisfactory. It is useful best to eat 2-2.30 hours before the contest. And the meal should consist of light easily digested foods so that they may clear the stomach by gave time (sports medicines 2005) Athletes like all people have special nutritional needs based on their age, life style and health status, level of physical fitness. The present study is carried out with above objectives to find out Nutritional status and Awareness of the Athletes.

**Limitations:** In this study students of the Bachelor of Physical Education, University College of Physical Education & Sports Sciences of the Acharya Nagarjuna University were selected from these “40” Males were selected in the Age group of 21-27 years now 40 students are divided into two age groups. One is below “25” years were grouped as Group-I and another is above “25” years were grouped as Group-II.

**Research Methodology**

**Oral Questionnaire Method:** This method is useful to carry out a diet survey in short time. Enquiries are made respectively about the nature and quantity of food eaten during previous 24 hrs. The survey may include collection of data electing to dietary habits and practices. In this questionnaire these have questions about the general information on age, income levels & educational status also. The Questionnaire which contained “45” Questions was practiced before administration. The Performa of “45” Questioned Questionnaire sheet was given. The subjects were given the Questionnaire and were asked to write down. Their response to the different questions in the presence of the investing for without any mutual consultation Height was measured according to method described by Jellify 1966 weight was measured by using Accuracy weighing scale Body mass index was calculated by using formula. B.M.I. weight in kgs/Height in Meter<sup>2</sup>.

**Results:** Like & Dislikes of Foods:- Generally every man has some like /dislikes about a particular food item. This habit will be based on many factors like environmental factors, religious factors and also some fads & fallacies about the food item. South Indian generally eats rice. Pulse consumption: - Everybody consumed Red gram dhal – 25% dislikes green gram dhal. In case of cereals most of the subjects dislike in age group of below “25” Because of unavailability and in group-2 50% dislikes Bajra because of the same reason. Only 40% of people dislike wheat. Similarly in older Age group 50% of people dislike Jowar, while 33.3% dislike maize.

Next in the case of pulses younger age group dislike green gram dhal, Black gram dhal in the percentage of 21.42% Based on the reason of no taste. Among the oil consumption in group-1 Athletes 42.85% were dislike butter because of high cholesterol content in group-2 athletes 16.67% were dislike ghee because this might be reason of high cholesterol content. Next in the case of Roots & Tubers consumption most of the subjects that mean 35.71% dislike radish because of unavailability and in group-2 beet root & sweet potato were dislike in the ratio of 16.67% because of no taste and colour appearance in consumption of sweets only 3.57% of the subjects in group-I & II dislike because of dental problems and also in case of snacks only 7.14% of the subjects in group 1&2 dislike snacks because of gastric trouble. Next in case of fruits consumption in younger age group 14.28% dislike papaya, pine apple, jack fruit depending upon the reason of heat, unavailability and in older age group 16.67% dislike papaya because of heat produce.

In consumption of vegetables most of the subjects dislike Brinjal and bottle guard in the percentage of 21.42% in both age group based on the reason of allergy and unavailability. In older age group most of the subjects dislike cabbage and snake guard because of no usage in their households. Next in the case of leafy vegetables in group-1 athletes 28.57% dislike palak curry because of unavailability and in group-2 16.67% of the people dislike palak curry because of unavailability. Next in case of nutritional awareness for the questions of more energy foods 42.85% were answered carbohydrates, proteins as in younger age group. But in older age group 50% assured carbohydrates. Next for the muscle strength 42.57% protein in younger age group. Similarly in older age group 58.33% answered carbohydrates. For the question of bone strength 57.14% calcium in group-1 athletes similarly in group-II athletes 58.33% answered calcium.

Next in the question of importance of vegetables 35.71% of the young age group answered these are good for health and also in older age group 33.33% answered good Digest food. Next in the question of importance of fruits 42.85% of the athletes in group-I answered healthy foods and in group-II 50% answered healthy foods. In the case of importance of roots 42.85% of the athletes in young age group answered rich in carbohydrates similarly in old age group 33.33% answered rich in carbohydrates & healthy foods about the question for cold fruits 64.28% in group-1 athletes answered watermelon But in group-II were answered coconut water.

Next in case of heat produced fruits 50% of the athletic in younger Age group answered papaya and also in older age group 66.67% answered papaya. Among in the case of cold vegetables 42.85% younger age group athletes answered leafy vegetables and in group –II 41.67% answered green leafy vegetables. But in the case of heat produced vegetables 50% of athletes both in younger and older age group answered drumsticks. In the case of health supplements taken 35.7% of the athletes said ‘Yes’ n the group-I in this subjects 17.86% of the subjects taken ‘B’ complex 7.14% taken vit-c and 10.71% taken calcium in group-II Athletes 33.33% taken health supplements and in these subjects 25% taken ‘B’ complex vitamins.

Next in the case of health problems faced 32.14% of the subject in younger age group said ‘Yes’ in these subjects 10.71% suffering once in monthly. In older age group 25% were said yes in these subjects 16.67% suffering once in a month. And in group-1 14.29% suffering from body pains and in group-II 16.67% of the subjects suffering from body pains, 8.33% suffering from joint pains in group-II Athletes 7.14% suffering from cold and 3.57% suffering from leg pains. Next in the active participation in the game all subjects in group-I & II were participated actively. Next in the time of participation in the game most of the subjects that means 78.58% participated till the end of the game in younger age group. Similarly in older age group 66.67% of the athletes participated actively till the end of the game. About the time of exercise 35.57% of the subjects in group-I exercised until they were tired and also in group-II 75% of the athletes exercised until tired in different types of exercise 28.57% in group-I says gym. In group-II 58.33% said gym.

**Anthropometric Data of Athletes:-** This Data includes height, weight B.M.I, I.B.W, N.I. of the subjects totally this anthropometric Data tells us the normal heights & weight of the athletes according to ICMR & standards.

**Mean Anthropometric data of athletes in below 25years & above 25 years.**  
(Mean + S.D With range of parenthesis)

Age group	Height	Weight	B.M.I.	I.B.W.	N.I.
≤ 25 range 21-24	170.5 ± 6.5 (162-182.5)	64.0 ± 6.53 (52+75)	22.06 ± 1.8 (19.63-26.9)	68.65 ± 2.83 (64-73.2)	37.3 ± 3.51 (30.9 – 44.6)
≥ 25 range 25-28	169.6 ± 6.59 (163-183)	63.5 ± 6.82 (54-74)	21.4 ± 9.76 (19.19-27.95)	67.8 ± 2.63 (48.2 + 73.8)	37.42 ± 3.21 (32.03-40.81)

In the above table shows the Height, Weight, B.M.I., I.B.W & N.I. of the Two Age Groups of the Students. This B.M.I. Data tells that all of the athletes belong to normal levels. But slightly there had some variations in the B.M.I. data that is in both age group athletes there has 17.8% of grade-I obesity peoples. In the case of IBW values except 17.8% of the athletes which were belonged to grade-I obesity remaining all were lie in normal I.B.W. values. The mean N.I. values of the athletes in below '25' years age group were in 37-32 in the rage of 30.95-40 similarly in above '25' years age group the mean N.I. was 37.42 within the range of 32.03-40.81 and the S.D. of the both groups way 3.15-3.2.

**Data on dietary intakes:**

In this Nutrient Data some of the different minerals and vitamins which are very essentials to the body development and for more energy were find out. Those are like energy, protein, fat, calcium, iron, vitamin-A, Thiamin, riboflavin & vita-c was found out. Based on using of the Data the health status and Nutritional intake levels were assessed. All the above minerals and vitamin quantities were presented in the case of energy the total mean intake of group –I were in 2911 k cal in the range of 1975-3785 kcal and the S.D. was in 398.36 similarly in the above age group the mean in take was 2775k cal. In the range of 2613-3631 k.cal. And their S.D. way in 333, the above data indicates that all of the athletes were taking low energy intake according to standard. The standard energy intake is 3000-5000mg/day.

**Mean nutrient in take of Athletes ≤ 25 & ≥ 25 years of age**  
(Mean ± SD within range parenthesis) R.D.A. (Recommended Dietary Allowances)

Age Group	Energy k-cal	Proteins (mg)	Fats (mg)	Calcium (mg)	Iron (mg)	Vitamin-A (mg)	Thiamine (mg)	Riboflavin (mg)	Vitamin-C (mg)
525 21-24	2911± 398.36	91±21 (62-134)	58±14 (28.3- 82.5)	577±242 (365- 1344)	16±9 (9-50)	1487±186 <sup>0</sup> (210-4452)	2.1±28 (1-16)	1.3±0.6 (1-3)	91±390 (0-1825)
≥25 25-28	2725±333 (2613- 3613)	90±12 (75-115)	55±10 (31.3- 725)	742±350 (444- 1580)	18±14 (11-51)	1909±1649 (312-5661)	2.6±4.3 (1-16)	1.1±0.2 (1-3)	67±46
<b>R.D.A</b>	(3000- 5000)	(60-190)	(80-150)	(600-800)	(20-30)	750-100020- 30	20-30	20-32	60

In the above table shows about difference between the two age groups of the Energy, Proteins, Facts, Iron, Vitamin-A, Thiamine, Riboflavin & Vitamin-C. This data tells as that all are the athletes taken correct amounts of proteins according to ICMR standards and it indicates that ill athletes hold taken low amounts of fats according to standards. The minimum deficient is 40-50mgs. That means athletes must and should take adequate amount of fats and the data also indicates that in calcium consumption levels were in adequate amounts. The recommended R.D.A. of calcium is 600-800 microgram/day. Iron consumption is also seen in very less amounts in this study in case of iron consumption. This data tells us the athletes were taken very lesser amount of iron. Then the standard levels. The ICMR standards are 20-30 mg/day.

**Deficient on dietary intakes of athletes**

Age Group	Energy	Protein	Fat	Calcium	Iron	Vit-A	Thiamin	Riboflavin	Vit-C
< 25	72.77	12%	504%	82.4%	64%	169.9%	84%	50%	15%
≥25	19.37	20%	47.8%	96%	72%	218%	104%	42%	11.1%

The above table shows about deficient on dietary intake of Energy, Protein, Fat, Calcium, Iron, vitamin-A, Thiamin, Riboflavin & Vitamin-C of the both age groups. The recommended dietary allowance is 60mg/day.

**Mean Energy Expenditure and Energy Intake of Athletes in ≤25 and ..... ≥25 Years.**

Age group	Energy expenditure	Energy intake	Mean differences	+ Ve balance	-Ve balance
≤25 age group	3304±318 (2546-3855)	2911±405 (1975-3755)	393	82%	18%
≥25 age group	3270±289 (2852-3608)	2775±337 (2613-3631)	494	83.3%	16.6%

In this data the mean calorie intake of the Athletes were taken in a day and their energy expenditure was calculated on that same day depending on different activity.

**Conclusion:** To sum up the results of the present study generally athletes are interested to win the game. Most of the people in India belong to lower income groups. Such people expect a good Nutritional status. General calories are deficient in 26-4%. Their height and weights are in standard according to ICMR standards. In BMI levels some students have obesity and chronic energy deficiencies other major nutritional deficient is fat, iodine, B-complex vitamins in the present study all are the athletes-deficient with nutrients. Both anthropometric measurements and dietary intake levels indicates that all are the athletes remained sufficient diets for successfully completing in athletic events. This may be the reason why most Indian athletes fail to complete with other group of the athletes it is high time that our Indian athletes should have standard heights and weights. The nutritional status of the athletes should also be improved in consuming good amount of fruits and vegetables to improve their nutritional status and also for energy requirement it looks necessary that sports institutions have nutritionists to awareness about the importance of each food and its functional importance for energy six months athletes should be check up of the heights, weights, B.M.I. levels. This may go a long way in winning competitions.

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## **A Comparative Study of Self Concept and Anxiety among Shuttle Boxers and Judokas of Osmania University**

**G.Sathyanarayana Reddy, Research Scholar, JNTU, Hyderabad**

### **Abstract:**

Self concept is a multidimensional construct that refers to an individual's perception of self in relation to any number of characteristics, such as academics, gender roles, racial identity etc. The self concept is an internal model which comprises self assessments. Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive and behavioral components. Anxiety invokes a feeling of fear or a perception of threat and which may be specific to and particular situation. The Purpose of the the present study to find out the Self concept and anxiety among Boxers and Judokas of Osmania University in India. The sample for the present study is fifty Male Boxers and fifty Male Judokas those who have participated in the Osmania University Inter College Sports and games during the year 2011-12 between the age group of 19 to 21<sup>st</sup> Years. R.K.Saraswath Self Concept Questionnaire and Sinha's Comprehensive Anxiety Test are used in the study. Each of the two instruments were administered individuals as well as a small group. Prior to administration of test through informal talk was explained the subjects procedures of the tests. This study shows that Boxers are having high self concept and low anxiety compare to Judokas. It is concluded that that Boxers are having the good self confidence and concept and less anxiety to achieve the high level of performance.

**Key Words:** Self concept, Anxiety, Psychological etc.

### **Introduction:**

In the modern sports, psychological preparation of a team / individual is as important as teaching as the different skills of a game with scientific methods. Most of the coaches agree that the physical characteristics, skills and training of the players are extremely important, but they also feel that good mental and Psychological preparation for competition is a necessary component for success. Self-concept is a multi-dimensional construct that refers to an individual's perception of "self" in relation to any number of characteristics, such as academics and non academics gender roles and sexuality, racial identity and many others. Each of these characteristics is a research domain (i.e. Academic Self-Concept) within the larger spectrum of self-concept although no characteristics exist in isolation as one's self-concept is a collection of beliefs about oneself. While closely related with self-concept clarity (which "refers to the extent to which self knowledge is clearly and confidently defined, internally consistent, and temporally stable it presupposes but is distinguishable from self awareness which is simply an individual's awareness of their self. It is also more general than self esteem which is the purely evaluative element of the self-concept

*Anxiety* invokes a feeling of fear or a perception of threat and which may be specific to & particular situation. Possible symptoms arc nausea, loss of composure, reduced motor coordination and aggression. Potential stressors are the climate temperature / humidity, circadian body rhythms - maximum efforts is harder in the morning, jei-lag. playing environment - stadium, spectators, surface, game officials and finally stress created by opponents or between players and the coach. I it; intensity of these influences on stress depend on the individual perception or inner experience of player.

### **Significance:**

The present study will bring the importance of Self concept and anxiety among Boxers and Judokas of Osmania University.

### **Objectives:**

1. To study the Self Concept among Boxers and Judokas of Osmania University.
2. The study the Anxiety among Boxers and Judokas of Osmania University.

### Experimental Design:

The sample for the present study is fifty Male Boxers and fifty Male Judokas those who have participated in the Osmania University Inter College Sports and games during the year 2011-12 between the age group of 19 to 21<sup>st</sup> Years. R.K.Saraswath Self Concept Questionnaire and Sinha's Comprehensive Anxiety Test are used in the study. Each of the two instruments were administered individuals as well as a small group. Prior to administration of test through informal talk was explained the subjects procedures of the tests.

### Research Methodology:

The sample for the present study is fifty Male Boxers and fifty Male Judokas those who have participated in the Osmania University Inter College Sports and games during the year 2011-12 between the age group of 19 to 21<sup>st</sup> Years. R.K.Saraswath Self Concept Questionnaire and Sinha's Comprehensive Anxiety Test are used in the study. Each of the two instruments were administered individuals as well as a small group. Prior to administration of test through informal talk was explained the subjects procedures of the tests.

### Sinha's Comprehensive Anxiety Test :

Contains 90 items of manifest anxiety. It is highly reliable and valid. Time 15 to 20 minutes. Scoring is simple. Percentile norms are available on college students. Level Of anxiety may be classified in five categories, highly reliable and valid in this test.

### Self concept Questionnaire :

R.K. Saraswat This 48 items measures self-concept in six areas -physical, social. Temperamental . educational, moral and intellectual. Highly reliable and valid in this test.

### Procedures of Data Collection:

Each of the two instruments were administered individuals as well as a small group. While collecting the data for the study the later approaches were adopted. The subjects were called in a small group of 20 to 25 subjects and there seating arrangements were made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedures suggested by the author of the tests, the tests were administered and a field copy of each test were collected. Following the same procedure, the whole data were collected.

### Results:

This study shows that Boxers are having high self concept and low anxiety compare to Judokas

### Discussion:

Table -I  
Anxiety of Boxers and Judokas

Players	Mean	S.D.	SE	N	df	"t"
Boxers	37.60	3.95	0.56	50	98	6.02**
Judokas	42.74	4.56	0.64	50		

In Table I the Mean of anxiety score of Boxers is 37.60 and Judokas is 42.74. There difference between the two mean is highly significant 't'= 6.02. df =98. P < 0.01. Thus Boxers are having the less Anxiety compare to the Judokas because they are have more psychological traits compare Judokas.

Table - II  
Self Concept of Boxers and Judokas

Players	Mean	S.D	SE	N	df	"t"
Boxers	60.22	4.30	0.61	50	98	8.96 **
Judokas	52.63	4.17	0.59	50		

Table –II shows the mean of self concept score of the Boxers is 60.22 and Judokas is 52.63 the difference between the two mean is highly significant ' $t$ ' = 8.96, df-98,  $P < 0.01$ . Thus the Boxers are having more self concept than Judokas. The Boxers are having more achievement motivation i.e.desire to excel and they are extraverts compare to the Judokas

**Conclusions:**

It is concluded that Boxers are having more Self Concept and less Anxiety compare to the Judokas.The Boxers are extraverts and they are having the desire to excel in the competition compare to the Judokas

**Suggestions:** It is suggested that Boxers and Judokas. must be given Psychological training to improve their psychological variables to excel in the competition.

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## A Study on the effect of sand running for development of endurance among athletes of Hyderabad District

**Dr.Rajesh Kumar, Associate Professor, Dept. of Physical Education, OU, Hyd**

### Abstract.

The aim of the present study was to study the effects of sand running for the development of endurance among College Athletes in India. 30 Male Students between the age group of 18 to 24 year i.e. 15 Experimental Group and 15 Control Group were taken for the study. The Six Weeks endurance training program for experimental group were given to experimental group which includes more sand running on alternate days and controlled group was given general training of athletics. The Pre Test and Post Test were conducted through Cooper Test for both groups to evaluate the effects of sand running. This study shows that the sand running has increase the endurance among the Experimental group along with Physiological capacity of the athletes. It is recommended that sand running is good for the development of endurance.

Key words: Endurance, Sand Running, Physiological

### Introduction:

Endurance is a conditional ability. It is primarily determined by energy liberation process. Endurance is directly or indirectly of high importance in all sports. Endurance is the ability to do sports movements, with the desired quality and speed, under conditions of fatigue. Endurance is a very important ability in sports. In sports endurance ensures optimum speed of motor actions. Good endurance also ensures high quality or skill of movement execution which finds expression in accuracy, precision, rhythm, consistency etc. Endurance training results in the improvement of functioning of various organs and systems of the human body. This in turn improves the ability to recover quickly from training and competition load. The importance of endurance for recovery assumes much more relevance during completion i.e. in between heats, rounds, matches on successive days. Endurance performances are of different nature indifferent sports. Endurance activities have been found to be of high value for maintenance of good organic health, for increasing the general resistance against infection and for cure and treatment of various diseases and metabolic disorder.

Sand Running is a form of Strength training that can improve speed and endurance on the track and road. Sand Running increase the intensity of training and builds strength because of the resistance they offer when running. Sand has a strengthening effect as well as boosting the athletes power and is ideal for athletes who depend on high running speeds. To reduce the possibility of injury sand training should be conducted once the athlete has a good solid base of strength and endurance.

Sand running offers the following benefits.

- a. Helps develop power and muscle elasticity.
- b. Improves stride frequency and length.
- c. promotes strength endurance.
- d. develop maximum speed and strength
- g. Improves lactate tolerance

### METHODOLOGY:

**Aim:** To find out the effects of Sand Running for development of Endurance among Athletes in Hyderabad, A.P.

**Sample:** The sample for present study is 30 College Male Athletes of Hyderabad District. The Experimental Group Sample is 15 Male Athletes and Controlled Group Sample is 15 Male Athletes.

**Tools:** 12 Min Cooper Test is used for collection of Data

### Procedure of data Collection:

The 12 Min Cooper Test were used for Pre Test for Experimental Group and Controlled Group and results was recorded. The 8 weeks training were given to Experimental Group which consists of Sand Running Sessions on alternate days. The Sand Running Sessions includes Short Sand Sprints, Continuous Running in Sand and Sand Hills were given training to experimental group. The controlled group was given the general training. After Eight weeks Training the Post Test were conducted experimental group and controlled group. The athletes generally hail from different socio-economic status, different dietary habits, mode of living etc. certain factors like daily routine, life style and food habits which would have an effect on the performance of both groups could not be controlled.

### RESULTS AND DISCUSSION:

Table No.1 is showing the Pre-Test slight difference in performance of experimental and controlled group and in Post Test there is a vast difference in Performance of experimental and controlled. The Experimental group has improved a lot due to Sand Running upto 284 Meters between Pre Test to Post Test. Due to the General Training the Controlled Group Performance has reduced to 38 Meters between Pre Test to Post Test.

GROUP	Results of 12 min Cooper Test	Mean	N	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Experimental Group	Pre Test(Mtrs)	3441.75	15.00	219.71	49.13	15.82	14.00	0.00
	Post Test(Mtrs)	3725.50	15.00	238.89	53.42			
Controlled Group	Pre Test(Mtrs)	3343.50	15.00	137.71	30.79	2.35	14.00	0.03
	Post Test(Mtrs)	3305.00	15.00	167.87	37.54			

### CONCLUSIONS AND RECOMMENDATIONS:

Sand Running results in the calf muscles learning to contract more quickly and thereby generating work at a higher rate, they become more powerful. The calf muscles achieves this by recruiting more muscle fibres, around two or three times as many when compared to running on the flat. Sand Running is recommended for endurance athletes more in off season and less in season.

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## A Comparative Study on Anxiety among Chess and Carroms Womens Players of Osmania University

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**Abstract:**Sports have a very prominent role in the modern society. Throughout the world, sports have a popular appeal amongst people of all ages and both sexes. Anxiety is a complex emotional phenomenon. It is reflected in the negative state of disturbed feeling which warns the athlete to find some ways to meet a situation. It is found in his unusual responses to situations. In an anxiety ridden state of mind, he is now incapable of doing things which earlier were fully under his control. It has startlingly been found influencing future events. Chess is a two-player board game played on a chessboard a square-checked board with 64 squares arranged in an eight-by-eight grid. It is one of the world's most popular games. Carrom is a family of tabletop games with gameplay that lies somewhere between billiards and table shuffleboard. The aim of the study was to find out the difference between anxiety among the Chess and Carroms Players of Osmania University in India. The sample for the present study is twenty female chess and twenty female carroms players those who have participated in the Osmania University Inter College sports and games for the year 2011-12 were taken for the study. Sinha's Comprehensive Anxiety Test has been taken to assess the anxiety. Results: The result of the study found that significance difference between Chess and Carroms Players. Chess are having less anxiety than carroms players

**Key Words:** Anxiety, chess, carroms etc.

### INTRODUCTION:

In the modern sports, psychological preparation of a team / individual is as important as teaching as the different skills of a game with scientific methods. Most of the coaches agree that the physical characteristics, skills and training of the players are extremely important, but they also feel that good mental and Psychological preparation for competition is a necessary component for success.

*Anxiety* invokes a feeling of fear or a perception of threat and which may be specific to & particular situation. Possible symptoms are nausea, loss of composure, reduced motor coordination and aggression. Potential stressors are the climate temperature / humidity, circadian body rhythms - maximum efforts is harder in the morning, jet-lag. playing environment - stadium, spectators, surface, game officials and finally stress created by opponents or between players and the coach. Intensity of these influences on stress depend on the individual perception or inner experience of player

**Chess** is a two-player board game played on chess board a square-checked board with 64 squares arranged in an eight-by-eight grid. It is one of the world's most popular games, played by millions of people worldwide at home, in clubs, schools, colleges, universities etc. Each player begins the game with sixteen pieces one king, one queen, two rooks, two knights, two bishops and eight pawns each of these types of piece moving differently. Pieces are used to attack and capture the opponent's pieces. The object of the game is to checkmate the opponent's king by placing it under an inescapable threat of capture. In addition to checkmate, the game can be won by the voluntary resignation of one's opponent, which may occur when too much material is lost, or if checkmate appears unavoidable. A game may also result in a draw in several ways, when neither player wins. The course of the game is divided in three phases. The beginning of the game is called the opening. The opening yields to the phase called the middle game. The last phase is the end game generally characterized by the disappearance of queens.

**Carrom** is a family of tabletop games with gameplay that lies somewhere between billiards and table shuffleboard. Carrom is known by many names around the world, including *carrum*, *couronne*, *carum*, *karam*, *karom*, *karum*, *fatta* (Punjabi) and **finger billiards**. The game was originated in India or Sri Lanka, but may have developed in more than one part of the world independently. Formal rules for the game were not published until 1988. The game and its variants are played in many countries across the world, recreationally and as a competitive sport as organised by the International Carrom Federation.

**Method:**

The sample for the present study is twenty female Chess Players and twenty female Carrom Players those who have participated in the Osmania University Inter College Sports and games during the year 2011-12 between the age group of 18 to 20 Years. Sinha's Comprehensive Anxiety Test are used in the study. Each instruments were administered individuals as well as a small group. Prior to administration of test through informal talk was explained the subjects procedures of the test. Each instrument were administered individuals as well as a small group. While collecting the data for the study the later approaches were adopted. The subjects were called in a small group of 10 subjects and there seating arrangements were made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedures suggested by the author of the tests, the tests were administered and a field copy of each test were collected. Following the same procedure, the whole data were collected.

**Results:**

This study shows that Chess Players are having the low anxiety compare to Carrom Players and their achievement Motivation is also to achieve the high level of performance compare to the chess players.

**Discussion:**

**Table –I:**Anxiety of Chess Players and Carrom Players

Players	Mean	S.D.	SE	N	df	“t”
Chess	38.60	3.96	0.57	20	38	6.02**
Carroms	43.74	4.57	0.65	20		

In table – I it shows that chess players are having the 38.60 mean compare the Carrom Players mean is 43.74, that means Chess Players are having the less Anxiety compare to the Carrom Players

**Conclusion**

It is concluded that Chess Players are having the less Anxiety compare to the Carroms Players. The Chess Players are extraverts and they are having the desire to excel in the competition compare to the Carrom Players.

**Recommendations: :**

It is suggested that Chess and Carrom Players must be given Psychological training to improve their psychological variables to excel in the competition. Similar studies can be conducted on other sports and games.

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## **How Sport can be Part of Civil Society? A Socio- Psychological assessment**

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### **Introduction**

Sports are clearly more important than ever to both the individual and society in economic, cultural and financial terms. Take for example, the growth of the Olympic Movement. Increases in broadcast revenue over the past two decades have provided the Olympic Movement and sport with an unprecedented financial base. From 1984 until 2008, the International Olympic Committee (IOC) has concluded broadcast agreements worth more than US\$ 10 billion (IOC, July, 2004). Displays of what in traditional religious vernacular could be termed liturgy and ritual and mass idolatry are part of the fabric of the game and the fourteen day build-up. This article will attempt to analyse the use of sports in the 21 st Century as a vehicle for spiritual upliftment in the place of contemporary religion.

### **Analysis**

Spirituality through Sport? Spirituality is relating to, consisting of, or having the nature of spirit; not tangible or material. Spirituality is associated with religion, deities, the supernatural, and an afterlife, although the decline of organized religion in the west and the growth of secularism has brought about a wider understanding of its nature. Traditionally, religions have regarded spirituality as an integral aspect of religious experience and have long claimed that secular (non-religious) people cannot experience "true" spirituality. Many do still equate spirituality with religion, but declining membership of organised religions and the growth of secularism in the western world has given rise to a broader view of spirituality.

While the terms spirituality and religion can both refer to the search for the Absolute or God (or whatever name you want to use), an increasing number of people have come to see the two as separate entities; religion being just one way in which humans can experience spirituality. Religion is not identical with spirituality; rather religion is the form spirituality takes in civilization. Those who speak of spirituality outside of religion often define themselves as "spiritual but not religious" and generally believe in the existence of many different "spiritual paths" - emphasizing the importance of finding one's own individual path to spirituality. According to one poll, some 24,4% of the United States population identifies itself as spiritual but not religious.

### **Physiological needs**

For the most part, physiological needs are obvious - they are the literal requirements for human survival. If these requirements are not met (with the exception of clothing and shelter ), the human body simply cannot continue to function. Physiological needs include: breathing, food, sexual activity, homeostatis. Lack of air and food will kill an individual. A lack of sexual activity would mean the extinction of humanity, probably explaining the strength of the sexual instinct in individuals.

## **Safety needs**

With their physical needs relatively satisfied, the individual's safety needs take over and dominate their behavior. These needs have to do with people's yearning for a predictable, orderly world in which injustice and inconsistency are under control, the familiar frequent and the unfamiliar rare. In the world of work, these safety needs manifest themselves in such things as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, and the like. These have been lacking for most of human history, but at this point are mostly satisfied in the "First World" -- although the poor, both those who are poor as a class and those who are temporarily poor (university students would be an example), must often still address these needs. Safety and Security needs include: personal security, financial security, health and well-being, safety net against accidents/illness and the adverse impacts.

## **Social needs**

After physiological and safety needs are fulfilled, the third layer of human needs is social. This psychological aspect of Maslow's hierarchy involves emotionally-based relationships in general, such as: friendship, intimacy, having a supportive and communicative family. Humans need to feel a sense of belonging and acceptance, whether it comes from a large social group, such as clubs, office culture, religious groups, professional organizations, sports teams, gangs, ("safety in numbers"), or small social connections (family members, intimate partners, mentors, close colleagues, confidants). They need to love and be loved (sexually and non-sexually) by others. Most people have a need for a stable self-respect and self-esteem. Maslow noted two versions of esteem needs, a lower one and a higher one. The lower one is the need for the respect of others, the need for status, recognition, fame, prestige, and attention. The higher one is the need for self-esteem, strength, competence, mastery, selfconfidence, independence and freedom. The last one is higher because it rests more on inner competence won through experience. Deprivation of these needs can lead to an inferiority complex, weakness and helplessness. Maslow stresses the dangers associated with self-esteem based on fame and outer recognition instead of inner competence. Healthy self-respect is based on earned respect.

## **Self-actualization**

The motivation to realize one's own maximum potential and possibilities is considered to be the master motive or the only real motive, all other motives being its various forms. In Maslow's hierarchy of needs, the need for self-actualization is the final need that manifests when lower level needs have been satisfied. Classical Adlerian Psychotherapy promotes this level of psychological development, utilizing the foundation of a 12-stage therapeutic model to realistically satisfy the basic needs, leading to an advanced stage of "meta-therapy," creative living, and self/other/task-actualization.

## **Maslow's writings are used as inspirational resources.**

Sport and Spirituality, harmful to the spirit? Sport is clearly one of the most successful ways of taking up time in an activity which, from a Marxist perspective, may have no "utilitarian value" (Jakubowski, 1990, p.86). For many it may be a total irrelevance. Take the joke concerning golf ruining a beautiful walk in the countryside. According Carroll (1998) argues that this view neglects the notion of "anima mundi" or soul. Sport for the ancient Greeks and Romans represented an avenue to find the connection to soul. The battle, whether it is on the golf course or in the boxing ring offers this opportunity to re-connect to the soul. The enthusiasm to participate in sport, either vicariously as a spectator or directly as a participant may be intrinsic. Testimony to this manifests itself in a child's playful actions.

The above is potentially reinforced through sport with its inherent ideals of "fair play" and "codes of conduct" enshrined in the rules and regulations. This is disputed, however by George Orwell in his essay, "The Sporting Spirit" written in 1945 where he comments upon the nature of modern sport, concluding that it has nothing to do with fair play. "It is bound up with hatred, jealousy, boastfulness, disregard of all rules and sadistic pleasure in witnessing violence; in other words war minus the shooting". Does the pursuit of sport harm the spirit? The prevalence of cheating and drug abuse does seem to challenge this aspiration of a connection to a "higher calling". Does spirit become severed in elite sport?

This question raises the issue of "sportsmanship" or the practice of ethical behaviour in modern sports. Sportsmanship is characterised by notions of civility and is "a matter of being good (character) and doing right (action) in sports" (Grough, 1997: p.21). Fair play and sportsmanship are challenged by what many regard as increased emphasis on a philosophy of "win at all costs". The impact of the coach is crucial in mediating the importance of sportsmanship and with it the notion of a games inherent spirituality.

### **Poor sportsmanship**

Poor sportsmanship may be exhibited by the winners "rubbing pudding in the noses" of the losers, or the losers expressing frustration at not winning, perhaps to the point of holding a grudge, booing the winner's national anthem (at an event such as the olympics) or failing to congratulate the winners. On certain levels of sport, poor sportsmanship is punished. For example, in American football, a team can receive a penalty for unsportsmanlike conduct. A competitor who exhibits poor sportsmanship after losing a game or contest is often called a "sore loser" (those who show poor sportsmanship after winning are typically called "bad winners"). Behavior includes blaming others, not taking responsibility for personal actions, reacting immaturely or improperly, making excuses for their loss, referring to unfavorable conditions or other petty issues.

### **Conclusion**

The intrinsic appeal of sport for many people is the uncertainty of outcome. Historically, however, this has never prevented mankind from attempting to tip the balance of uncertainty through various forms of cheating; indeed, the emphasis upon victory in sport defies and corrupts the ethics of fair play. If sport does indeed offer a vehicle with which to fill the spiritual void left by the demise of traditional forms of religion, it may do well to adopt the Buddhist philosophy which states that "Life is a journey". However, in the context of Indonesian people who are religious, the spirit of sport is believed as in accordance with the spirit of religion.

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## **An Study On Psychological Factors Of Kabbadi Players & Kho Kho Players of Osmania University**

**Dr.B.Sunil Kumar, Chairman, Board of Studies of Physical Education, O.U. Hyd**

### **INTRODUCTION**

The importance of sport psychology in Kabbadi and Kho Kho is becoming increasingly well recognized with many professional clubs employing psychologists in India. Sport psychology is sometimes called mental preparation or training, mind games, or mind over matter. The aim is for the team to play Kabbadi and Kho Kho at peak performance in every match. Sport psychology is no substitute for skills, and it is vital to emphasize the importance of skills, particularly when coaching the sports and games. Since the main aim of psychological training is to attain peak performance, it will not help much if your peak performance is poor! The first step is to decide what you want to achieve. Do you have a dream that you wish to make a reality? It's important to discover what motivates you, and to write down a mission statement or creed to provide motivation.

#### **Motivation:**

Motivation is an internal energy force that determines all aspects of our behavior, it also impacts on how we think, feel and interact with others. In sport, high motivation is widely accepted as an essential prerequisite in getting athletes to fulfill their potential.

#### **Anxiety:**

Anxiety has long been recognized as a prominent symptom of many psychiatric disorders. It was Freud (1859b) who first suggested that cases with mainly anxiety symptoms should be separated under the name of anxiety neurosis.

#### **SIGINIFICANCE OF THE STUDY:**

The study is to determine the psychological factors of Kabbadi and Kho Kho players. Testing the personality of the player may prove beneficial; the coach can have an idea of the differences in personality between players and thus learn how to better handle the issue. Tests have shown that successful footballers possess superior mental and emotional health (less anger, tension and more vigor) than others who may need psychological support/counseling.

#### **DATA COLLECTION PROCEDURE**

The subjects of the study were in the age group between 18 to 22 years, 20 Male Kabbadi players and 20 Male Kho Kho players of Osmania University players were taken into consideration. The researcher has collected the data separately for Kabbadi and Kho Kho Players. The subjects were tested two categories of psychological factors i.e motivation and anxiety. Sinha scale was adopted for opinionnaire which consists of 30 (thirty) statements used to measure motivation. Sport Competition Anxiety Test (SCAT) that was developed by Martens, Vealey, and Burton in 1990. which is consists of 15 questions.

#### **RESULTS AND DISCUSSION**

The results pertaining to the study are present in the following

**The table showing significant differences between Kabbadi and Kho Kho players of Osmania university players in relation to their motivation.**

Sl. No.	Subjects	N	Mean	S.D.	df	't' ratio	P value
1.	Kabbadi Players	20	30.84	8.96	38	4.26	0.01
2.	Kho Kho Players	20	27.68	9.76			

**The table showing significant differences between Kabbadi and Kho Kho players of Osmania university players in relation to their Anxiety.**

Sl. No.	Subjects	N	Mean	S.D.	df	't' ratio	P value
1.	Kabbadi Players	20	16.78	6.98	38	3.18	0.05
2.	Kho Kho Players	20	17.64	7.95			

**The table: 1** motivation shows the mean, standard deviation, degrees of freedom, t-value and significance between Kabbadi Players and Kho Kho Players in relation to their Motivation. The mean value of Kabbadi Players was 30.84, standard deviation was 8.96 and the mean value of Kho Kho Players was 27.68 and standard deviation was 9.76. The obtained t-ratio was 4.26, which was found to be significant at 0.01 level.

**The table: 2** Anxiety shows the mean, standard deviation, degrees of freedom, t-value and significance between Kabbadi Players and Kho Kho Players in relation to their Anxiety. The mean value of Kabbadi Players was 16.78, standard deviation was 6.98 and the mean value of Kho Kho Players was 17.64 and standard deviation was 7.95. The obtained t-ratio was 3.18, which was found to be significant at 0.05 level.

#### **Conclusion**

Hence, it is finally concluded that the major role of the sport psychologist is to provide information and help student athletes cope with the effects of sport by offering techniques and strategies to increase concentration, confidence, consistency, control and motivation. Sport psychologists can help student athletes to cope with the pressures of sport by helping individual athletes to learn different coping skills and stress management skills. Cook (1990) also commented on the important role that sports psychologists have in helping athletes to overcome mood swings and assist recovery from injury.

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## A Comparative Study Anxiety Among Yoga And Chess Women Players Of Osmania University

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**Dr.L.B.Laxmikanth Rathod, Professor, Dept. of Physical Education, OU**

### **INTRODUCTION:**

Sports and performance anxiety often go hand-in-hand. Have you ever "choked" during an important sporting event or felt your nerves get in the way of your athletic performance? While many athletes become "pumped up" during competition, when the rush of adrenaline is interpreted as anxiety, and negative thoughts begin to swirl, it can have devastating effects on your ability to perform. Before you learn how to manage the symptoms of anxiety during competitions, it is important to understand the relationship between anxiety and athletic performance. Anxiety before or during athletic competitions can hinder your performance as an athlete. The coordinated movement required by athletic events becomes increasingly difficult when your body is in a tense state. A certain level of physical arousal is helpful and prepares us for competition. But when the physical symptoms of anxiety are too great, they may seriously interfere with your ability to compete. Similarly, a certain amount of worry about how you perform can be helpful in competition, but severe cognitive symptoms of anxiety such as negative thought patterns and expectations of failure can bring about a self-fulfilling prophecy. If there is a substantial difference between how you perform during practice and how you do during competitions, anxiety may be affecting your performance. Anxiety describes the individual's level of emotionality. Anxiety and arousal are related because at the higher levels of arousal we considerably have more emotionality than at the lower levels. Since anxiety is an inferred emotional state of the organism and cannot be directly observed, investigations of anxiety rely heavily on having the individual report her own emotional states under various stress conditions. It has been observed that anxiety is a physiological response to a real imagined threat. It is a complex emotional state characterized by a general fear. Feelings of rejection and insecurity are usually a part of anxiety. A certain amount of anxiety is needed for peak performance.

### **METHODOLOGY:**

#### **Objectives of the study:**

The objectives of the study are stated as follows:

- 1) To study the anxiety among Yoga and Chess players.

#### **Hypothesis :**

There would be no significant difference between Yoga and chess players on anxiety.

#### **Selection of Sample:**

The sample consists of twenty Women Yoga and twenty Women chess players those who have participate in the O.U. Inter College sports and games for the year 2011-12. The present study is based on survey method.

#### **Tools used :**

Sinha's Comprehensive Anxiety Test has been taken to assess the anxiety. This questionnaire consisted of ninety statements.

### **STATISTICS USED:**

Student's t test has been applied to find out the significant differences among two groups at 0.05 levels of significance. The collected data were tabulated to find out the difference of anxiety among two groups.

## RESULTS AND DISCUSION:

**Table - 1 Means, SDs and T-ratio of anxiety between Junior and Senior women players**

Variable	Group	N	Mean	SD	T-ratio
Comprehensive Anxiety	Yoga	20	13.9	2.22	4.31*
	Chess	20	12.5	2.30	

\* Significant at 0.05 levels.

The means of anxiety for Yoga Players was 13.9 and Chess Players was 12.5. The calculation of mean, standard deviation and T ratio of junior and senior on anxiety are presented in table 1. Table 1 reveals that there is significance between Yoga and Chess players on anxiety. Thus it may be concluded that anxiety of both Yoga and Chess players are different.

## CONCLUSIONS :

On the basis of the study the following conclusions were drawn:

1. Chess women Players were having the less anxiety than Yoga Women Players
2. There was significant difference between Yoga and chess women players on anxiety.

## RECOMMENDATIONS:

1. While giving psychological training along with yoga and meditation, special attention must be given on anxiety
2. Sports Competition Anxiety help in improving performance.
3. During competition players are mentally anxious and this affects them in handling performance. To avoid such effects players prepared psychologically.

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About.com Health's Disease and Condition content is reviewed by the Medical Review Board

## History of Hockey in India

Dr.G. Arun Kumar, Associate Professor, Dept. of History, Osmania University, Hyd

### Introduction:

Stick and ball games with some similarities to field hockey include the Irish game of hurling (and its Scottish cousin shinty) which dates from at least 1272 B.C in Ireland. In Inner Mongolia, China, the Daur people have been playing Beikou (a game similar to modern field hockey) for about 1,000 years. European settlers in Chile in the 16th century described a hockey-like game of the Araucano Indians called *chueca* (or 'the twisted one' from the twisted end of the stick used by players). In Western Australia, early white settlers witnessed Noongar people played a game called *dumbung*, in which bent sticks were used to hit a ball made of dried sap from the native peartree. [http://trails.heritage.wa.gov.au/ht\\_pdf/Dumbleyung.pdf](http://trails.heritage.wa.gov.au/ht_pdf/Dumbleyung.pdf) The game is believed to be the source of the name of Dumbleyung, a town near where it was played

The history of the game of hockey has its roots well laid in the world's early civilizations. One of the oldest known sports, the game is believed to be in existence about 1200 years before the Ancient Games of Olympia. Right from Arabs, Greeks, Romans, Persians to Ethiopians, everyone played a variation of the game. While some played it just for recreation, the others were of the opinion that hockey would make them better warriors. Even though many ancient civilizations played hockey in different variations, the modern game of hockey, the field hockey, developed in the British Isles in the 19th century. A popular English school game, hockey was introduced in India by British Army regiments and the game soon found to be favor among the native Indians. Spreading internationally, the popularity of the game was especially effervescent in India and Pakistan. It was during this time that the London Hockey Association was formed and the rules for playing hockey were standardized. In 1924, the International Hockey Federation (FIH) was formed and three years later, the International Federation of Women's Hockey followed. Talking about hockey in India, the first hockey club came up in Calcutta in 1885-86 and soon Bombay and Punjab followed suit. Making its Olympic debut at the 1928 Amsterdam Games, Indian hockey team cruised home to its first Olympic gold, without conceding a single goal. The hallmark of this ruthless domination was the wizardry of Indian hockey legend - Dhyan Chand, who mesmerized the Amsterdam crowd with his dazzling skills. From 1928 to 1956, the Indian hockey juggernaut won six straight Olympic gold medals, while winning 24 consecutive matches. During this time, India scored 178 goals conceding only 7 in the process.

**Discussion:** This was the golden era of Indian hockey, when India loomed large in world hockey and produced some of the finest players the game has ever seen. During this dominance, one name that clearly comes to mind is Balbir Singh. For almost three decades, Indian team had about five players with the same name. The first Balbir Singh played with the great Indian teams of 1948, 1952 and 1956. He reached the pinnacle of success at Helsinki in 1952 when he scored five goals in a 6-1 gold medal victory over the Netherlands. The four later Balbir Singhs played with the later Indian champions.

**Recommendations:** The Indian stranglehold over the Olympic hockey gold came to an end, when Pakistan defeated India in the final of the 1960 Rome Olympics. However, the record created by India is likely to stand strong through ages, as no other country has ever managed to come close to it, leave about beating it. Talking about some of the legendary and outstanding players of Indian hockey, Dhyan Chand, K.D. Singh, Dhanraj Pillay and Dilip Tirkey etc.

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## **India are World Champions in Cricket**

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**Tejavath Kamala,M,Ed,Department of Education.**

**Introduction:** Finally the wait is over. After 28 years, India won the world cup again. Incredible India are the Champions of the World Cricket. India won the Cricket World Cup 2011 after beating Sri Lanka by six wickets in the final played at the Wankhede stadium in Mumai, on 2<sup>nd</sup> April 2011. chasing a challenging target of 275, India achieved the target after losing four wickets with 10 balls to spare. India's win was spearheaded by Gautham Gambhir (97) and skipper MS Dhoni (91 Not Out) who played anchor role to keep their winning hopes high throughout the game. Sri Lanka gave India a stiff target after winning the toss and electing to bat first. They posted 274 for six wickets with deputy skipper Mahela Jayawardene playing a leading role. India deservedly won a thriller at Mumbai beating sizzling Sri Lanka by 6 wickets. Captain MS Dhoni playing the innings of his life time led his team India from the front to win India's second World Cup Title after 28 years. It was emotional farewell to two of the all time greats Sachin Ramesh Tendulkar and Muttiah Muralidharan. It is the first time a host country won the world cup playing in front of home crowd. It is also the first time that three out of the four semi finals were from one continent. With this, invincible Australia's reign of world cricket has come to an end. ICC WC 2011 co hosted by India, Sri Lanka and Bangladesh witnessed three sub continental giants India, Pakistan and Sri Lanka featuring in the Semi Finals. Favorites Australia, South Africa and England could not even get to semi finals. Surprisingly New Zealand advanced to semifinal, but lost to Sri Lanka, Finally curtains were dropped on the 44 days long cricket world cup 2011 with favorite India winning the tournament for the second time. For several reasons the mega event of cricket co hosted by three South Asian nations India, Bangladesh and Sri Lanka will be remembered as one of the best ever staged. It started with spectacular opening ceremony at Bangabandhu National Stadium in Dhaka and completed in sub continental giant India lifting the trophy amidst great euphoria and fanfare at India's bollywood city Mumbai in nine previous world cups West Indies won the first two versions Prudential World Cup of 1975 and 1979 very easily beating Australia and England. India won it in 1983 upsetting West Indies. Australia lifted it first time beating England in 1987 when world cup took place for the first time in the subcontinent. Imran Khan's Pakistan beat England at Melbourne in 1992 to win the cup. In 1995 Arjuna Ranatunga led Sri Lanka to beat Australia at Lahore to win it. Since 1999 it was Australia who made it their home trophy. First in 1999 it crushed Pakistan in England, in 2003 India lost to Australia at South Africa. In a rain affected final, Sri Lanka lost to Australia in 2007 at West Indies in the final.

### **DETAILS OF ICC CRICKET WORLD CUP – 2011**

The 2011 ICC Cricket World Cup is the tenth Cricket World Cup and is being played in Bangladesh, India and Sri Lanka. It is Bangladesh's first time co-hosting a World Cup. All matches in the World Cup will be accorded One Day International status, with all matches being played in 50+50 overs. Fourteen national cricket teams are competing in the tournament, including ten full members and four associate members. The World Cup matches took place between 19<sup>th</sup> February and 2 April 2011, with the first match played on 19<sup>th</sup> February 2011 with co-hosts India and Bangladesh facing off at the Sher-e-Bangla National Stadium in Mirpur, Dhaka. The opening ceremony was held on 17<sup>th</sup> February 2011 at Bangabandhu National Stadium, Dhaka, two days before the start of the tournament, with the final on 2 April 2011 at Wankhede Stadium, Mumbai.

### **PRIZE MONEY:**

The 2011 Cricket World Cup winning team would be taking home a prize money of US\$3 million and US\$ 1.5 million for runner-up, with the International Cricket Council deciding to double the total allocation for

the coveted tournament to US\$ 10 million. The winning team will also take home a replica of the ICC Cricket World Cup Trophy, that has been awarded since 1999.

#### **THE ICC CRICKET WORLD CUP HISTORY:**

The ICC Cricket World Cup is the premier international championship of men's One Day International (ODI) cricket. The event is organized by the sport's governing body, the international cricket council (ICC), with preliminary qualification rounds leading up to a finals tournament which is held every four years. The tournament is the world's fourth largest and most viewed sporting event. According to the ICC, it is the most important tournament and the pinnacle of achievement and the sport.

The first Cricket World Cup contest was organized in England in 1975. A separate Women's Cricket World Cup has been held every four years since 1973. The finals of the Cricket World Cup are contested by all Ten-playing and ODI- playing nations, together with other nations that qualify through the World Cup Qualifier. Australia has been the most successful of the five teams to have won the tournament, taking four titles. The West Indies have won twice, while Pakistan, India, and Sri Lanka have each won once. The 2007, in the West Indies. The 2007 tournament had sixteen teams competing in a pool state (played in round-robin format), then a "Super8" stage, followed by semi finals and a final. Australia defeated Sri Lanka in final to retain the championship. The 2011 cricket world cup was held between 19<sup>th</sup> February and 2<sup>nd</sup> April 2011. the tournament will be co-hosted by Bangladesh, India and Sri Lanka. There are 14 countries that are participating the tournament.

#### **PRUDENTIAL WORLD CUP:**

The inaugural Cricket World Cup was hosted in 1975 by England, the only nation able to put forward the resources to stage an even of such magnitude at that time. The 1975 tournament started on 7<sup>th</sup> June. The first three events were held in England and officially known as the Prudential Cup after the sponsors Prudential plc. The matches consisted of 60 six ball overs per team, played during the day time in traditional form, with the players wearing cricket white and using red cricket balls.

#### **INDIA THE WORTHY WINNERS:**

For the last few years India has been dominating all forms of the game around the world. After the disastrous 2007 World Cup, India under the able management of the South African Coach Gary Kristen and Yung enterprising captain MS Dhoni regained self confidence and gradually developed into a winning unit. They won T20 Championship, climbed to the top of ICC ranking in the Test Cricket and emerged as potential winners of World Cup.

**References: Sports Magazines, News Papers etc.**

**Modern Olympic Games****Qudratulla Khan**

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**Introduction:** Olympic is an International Sports Festival, which originated in the city of Olympia an ancient city of Greece, situated in the west Peloponeese. The most important thing in the Olympic Games is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have concord but to have fought well. The Olympic Games reached their zenith in the 6<sup>th</sup> centuries BS.

**MODERN GAMES:**

The 1796 Games also marked the introduction of the metric system into sport. In 1850 an Plympian class was started by Dr. William Pennay Brokes at Much Wenlock, in Stropshire, England in 1859. Dr. Brokes changed the name to Wenlock Olympian Games. This annual sports festival continues to this day. The Wenlock Olympian Society was founded by Dr Brookes on 15<sup>th</sup> November 1860. The programme of the first modern Olympiad in Athens in 1896 was almost identical to that of the Liverpool Olympics. In association in Liverpool, in a forerunner of the British Olympic Association.

**MODERN OLYMPIC REVIVAL:**

Greece interest in reviving the Olympic Games began with the Greek war of independence from the Ottoman Empire in 1821. The Panathinaiko Studium hosted Olympics in 1870 and 1875.

**1896 SUMMER OLYMPICS:**

The first game held under the auspices of the IOC was hosted in the Panathenaic stadium in Athens in 1896. After the success of the 1896 games the Olympic entered a period of stagnation that threatened their survival. The Olympic Games held at the Parse Exposition in 1900. The Games in Paris did not have a stadium however, this was the first time women took part in the games.

**WINTER OLYMPIC GAMES:**

The Winter Olympics (first held in Chanonix, France, 1924) were created to feature snow and ice sports that were logistically impossible to hold during the summer games. A winter sports week (it was actually 11 days) was held in 1924 in Chamonix, France.

**YOUTH OLYMPIC GAMES**

In 2010, the Olympic Games were complemented by the youth games, which give athletes between the ages of the 14 and 18 chance to competes. The youth Olympic games were conceived by IOC President Jacques Rogge in 2011 and approved during the 119<sup>th</sup> Congress of IOC. The first summer youth games were held in Singapore from 14-26 August, 2010, while the inaugural Winter Games will be hosted in Innsbruck, Austria, two year later. These games will be shorter than the senior games. The games have grown to about 10,5000 competitions from 204 countries at the 2008 Summer Olympics. The current version of the charter does only allow new National Olympic Committees representing "Independent State Recognized by the International Community.

## A Study On Anxiety Behaviour Among The Sportswomen And Non Sportswomen

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**INTRTODUCATION:** The pressure experienced by players especially at a professional level is recognized as influencing playing performance. Heavy playing schedules, competition for team places, the media and fans as well as the pressure to win trophies all play a part in players developing high stress and anxiety levels. Even experienced players can suffer from pre-match anxiety. Developing ways to control this is important in order to prevent players from 'falling' apart. And anxiety level will be decided by individual life style and social environment.

**ANXIETY:** Anxiety is a physiological response to a real or emarginated threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and tear and is frequently associated with failure, either real or anticipated. It often has to do with inter-personal relations and social situations. Feeling of rejection and insecurity are usually a part of anxiety. According to Frost (1971), anxiety is "an uneasiness and feeling of foreboding often accompanied by a strong desire to excel". Hence, anxiety state arises from faulty adaptations to the stress and strains of life and is caused by over actions in an attempt to meet these difficulties.

A discriminate analysis of self-ratings of college students having differential manifest anxiety, by, Mukherjee (1969), has revealed that those with high scored on the manifest Anxiety scale tend to rate themselves lower on perseverance and higher on perfection dimensions than those scoring low. A multivariate analysis that the high group expressed an overall inferior self-image than the low group.

**Statement of problem:** The purpose of the study is to assess the sports competitive anxiety a among the Sportswomen non-sportswomen of K.S.W.Universityy Bijapur.

**Variables:** Independent: Sportswomen and Non-sportswomen of University players.

Dependent Variable:- Anxiety behavior.

**HYPOTHESIS:** To answer the problems set for the present study, the following Hypotheses were formulated.

There will be no significant difference between mean, competitive anxiety scores of sport women and non-sport women of Karnataka State Women's University, Bijapur.

**OBJECTIVES:** To assess the anxiety behavior of the Sportswomen and non- sportswomen

**Limitations:** 1. The study is limited to the measuring the level of anxiety among the sportswomen and non-sportswomen.

2. The study would be limited to the sportswomen and non-sportswomen of Karnataka State Women's University Bijapur.

**Delimitation:** The present study tries to analyze probe the level and extent of anxiety, among the sports and non-sportswomen.

**Significance of the Study:** To examine the difference in pattern of anxiety behaviors between sportswomen and non-sportswomen of University.

### Test Administration

**Tools: Anxiety:** The Sinha's Comprehensive anxiety scale was administered to two samples of P.G. students, who were belonging to sportswomen and non-sport women group. The athletes sample consisted of 50 P.G. students who were studying in one or other P.G. course and has participated in sports activities at different levels of competition. The non-sportswomen sample consisted of those students who were studying in different P.G. Courses and who did not participate in any sports activities.

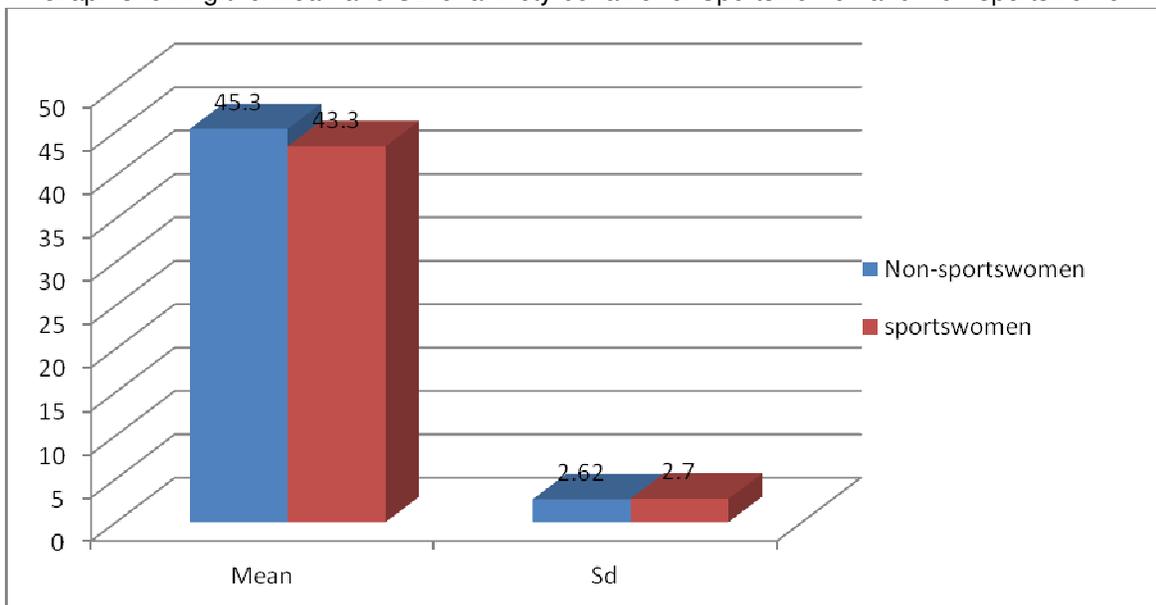
**Statistical Analysis:** To know the significant difference of anxiety behavior among o the sportswomen and non-sports, mean, variance, standard deviation and't' were calculated. The results are discussed here.

**Table – 1**

**Table Showing the mean, SD and acquired 't' value of anxiety behavior of Sportswomen and non-sportswomen**

Sl. No.	Variables	Mean	SD	't' Value
01	Non-sportswomen	45.3	2.62	0.12
02	sportswomen	43.3	2.70	

Graph showing the Mean and SD of anxiety behavior of Sportswomen and Non-sportswomen



The mean scores and standard deviation on non-athletes and athletes were 45.3, 2.62 and 43.3, 2.70 respectively which show that there is not much or little deviation in the anxiety level of sportswomen and non-sportswomen. Both non-sports and sportswomen showed almost same level in anxiety behaviors. When these scores were subjected to 't' test, the acquired 't' value was 0.012 which was lower than 't' table value at 0.05 level hence. It reveals that there is no difference in anxiety behavior of Sportswomen and non- sportswomen. Hence formulated hypothesis was rejected. This may be due to the fact that the respondents consisted to sportswomen and non-sportswomen are coming from rural areas they are exposed to various activities and faced lot of problem to pursuing their degree and education and hard working nature made them to sustain stress and manage anxiety behavior effectively when they exposed to situation.

**Conclusion:** The Study carried out by researcher reveals that anxiety behavior will manifested by situational factor but sportswomen and non sportswomen chosen for this study were coming from the rural and poverty background, these factor made them to cultivate the sustainable ability and managing skills among the sportswomen and non sportswomen of the university.

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## **Effect of Socio-Economic condition on aggressive behavior of Junior National volley ball players.**

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### **Introduction:**

There has always been interest in aggressive behavior and competitive sport. Several writers have mentioned that sport provides a necessary “safety value” or cathartic release for the aggressive drives of the human (Scott, 1970; Lorenz, 1966). Opponents of this position have posited that successful aggressive behavior facilitates further aggressive behavior. Controlled research findings support this view and many writers have stated that sport should not be compromised as an excuse for punitive and criminal – like behavior (Mc Murty, 1974; Underwood, 1978; Vaz, 1976).

The arguments for and against aggression and violence in sport are often emotional debates. A major obstacle encountered in this discussion is that the discussants are frequently not talking about the same concept even though they are using the same term! When one begins to examine the various writings on aggressive behavior, it is clear that the term aggression has the misfortune of being defined in a multitude of ways. The use and misuse of the term is often confusing to players, coaches, and researchers. What does one mean by aggression or aggressiveness? Since these terms have taken popular connotations, they are often used to describe different classes of behavior rather than a unitary concept. Unfortunately, research on aggressive behavior in sport has also been plagued by inconsistencies and vague definitions of “aggression” both as an independent and dependent variable. It appears that a clarification of the term aggression will benefit all who are interested in furthering the understanding of aggression and athletic performance.

### **Methodology:**

In view of above, the paper makes an empirical attempt to understand the socio-psychological correlates with the aggressive behavior of National junior volley ball sportsmen. The hypothesis is formulated there would significant difference between high SES and low SES of sportsmen in their aggressive behaviors.

A sample of 100 sports in the range of 16 to 19years having equal representation of male (50) and female (50) and also sports men from high Socio-economic background and low socio economic background are studied. A semi-structured interview schedule is being administered to attain objectives of the study.

### **Results and discussion:**

**Table Showing the Mean, SD and’t’ values of Aggressive Behavior of High and Low SES of Sportsmen**

<b>Variables</b>	<b>High SES</b>	<b>Low SES</b>
<b>Mean</b>	<b>9.83</b>	<b>12.83</b>
<b>SD</b>	<b>3.97</b>	<b>2.90</b>
<b>t-value</b>	<b>6.13**</b>	

\*\* Significant at 0.01. level.

**The graph shows mean, SD of high SES and Low SES of Sportsperson.**

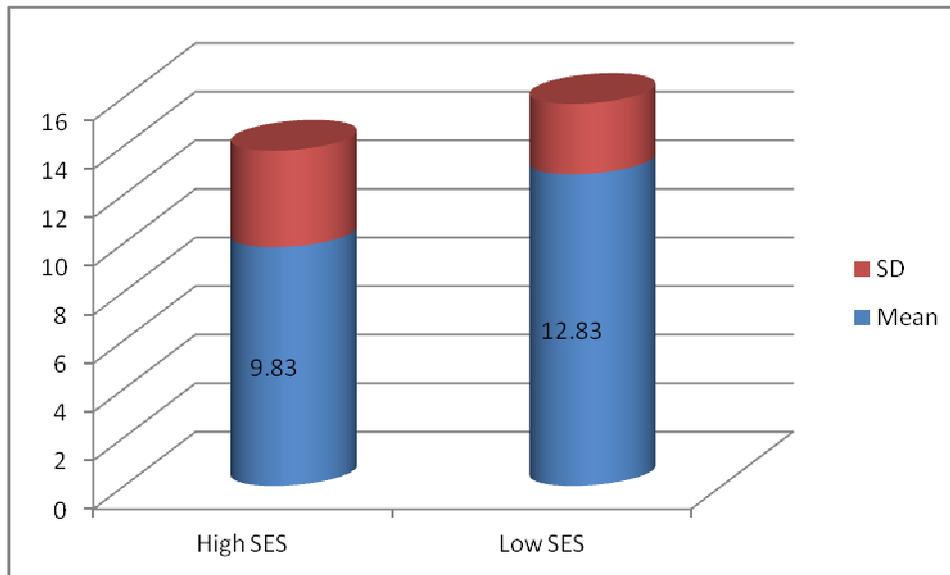


Table-1 reveals the mean, SD and 't' value of aggressive behavior of sportsmen belonging to high and low SES. The mean score of high and low SES sportsmen on aggressive behavior is 9.83 and 12.83 respectively. This difference in their mean score suggests that the sportsmen belonging to high SES are moderate in their aggressive behavior when compared to the sportsmen of low SES, who are more aggressive. The obtained 't' value 6.13 which is highly significant at 0.01 level suggest the fact that, there is a significant difference between the sportsmen of low and high SES sportsman in aggressive behavior. Therefore, the hypothesis that there is a significant difference in the aggressive behavior of sportsmen belonging to high and low SES is confirmed. The sportsmen of high SES are more successful in keeping their aggression at moderate level than the low SES sportsmen. It is due to their quality education, exposure to the different sport competitions, proper training and ideal mental makeup. This is not so, in case of sportsmen of low SES, who are high aggressive in their behavior as they are deprived of quality education, proper training and exposure to the different sport competitions.

**Conclusion:**

The current study reveals that aggressive behavior of the sportsperson is not merely results of the sports situational stimulus, but it is also the productive and effected of socio-economic and culture condition of a sportsperson.

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