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Analysis of Selected Psychological Skills of Male & Female Participants in Different Sport Domains

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ABSTRACT

This investigation was purported to analyze the selected psychological skills of male and female participants in different sport domains. For this reason, 320 sportsperson from different sport domains (individual and team sports) were selected as subjects from Guntur district, Andhra Pradesh, India. These subjects were in the age group of 18 to 21 years, and they were tested for their level of achievement motivation and competitive anxiety using standardized instruments. The data collected were subjected to statistical analysis by means of Two-way ANOVA, and simple effect test. The confidence interval was fixed at $p < 0.05$ in all cases. The research findings imply that difference in gender and participation in different sport domains contributes to the variation in developmental process on achievement motivation and anxiety.

Introduction

Every human being is born with specific physical and psychological strengths and weaknesses, yet the skills are learned and developed through day to day endeavours. Irrespective of the sport in question, an athlete's success or failure is dependent on a combination of physical and mental abilities (Nideffer, 1976). Psychological, social and physical development process project powerful influences on sport participation, defined broadly as engagement, learning, and performance in sports. Sport experiences often foster citizenship, social success, positive peer relationships, leadership skills, and a sense of initiative in participants.

The highly desirable benefits of a physically active lifestyle are mastery of motor and sport-specific skills that contribute to competence in lifelong physical activities, attaining social and psychological life skills (e.g., interpersonal skills, resistance skills), and improving developmental outcomes such as confidence, self-regulation, character, motivation, and perseverance (Weiss, 2008).

Developmental sport psychology is the term for the area of study focused on determining the role of sport participation experiences in developing psychological, social, and physical competencies. The acquisition of sport skill expertise is both a product of development and a process for development, meaning that psychological development affects sport skill acquisition and that the sport skill acquisition process results in psychological changes.

Youth sport participants themselves give many specific reasons or motives for sports participation, and typically have higher perceptions of competence and control than those who drop out. Competence motivation theory suggests that mastery behaviour in activities such as sport is predicted by one's perceptions of ability and sense of control over performance situations. Achievement goal theory shows that behaviour is often predicted by children's perceptions of their abilities and their goal perspectives, meaning their views on what it means to be successful in sport.

Contemporary thinking views stress as a dynamic relationship between athletes and their practice and competition environment. Specifically, performers appraise the demands to cope with these demands. Inherent within this approach is the perspective that performers will encounter many different demands that tax their resources and it is the athletes' perceived ability to cope with these that form the process of stress. If athletes feel that they cannot cope with the demands then they are then likely to experience different levels of competition anxiety.

Elite athletes repeatedly have to perform under high pressure, and it is therefore not surprising that psychological characteristics often distinguish those successful at the highest standard from their less successful counterparts (Morris, 2000). Early research evidence already supported an association between psychological characteristics and sports performance (Morgan & Pollock, 1977; Morgan, 1979; May et al., 1985). Further research evolved with an emphasis in identifying psychological skills relevant to sport (Meyers et al., 1996). Yet, it is not self-evident that the relation between psychological skills and performance level is similar for different types of sports or for males and females.

The conceptualization of sport structure plays a vital role in the modification of psychological skills. Furthermore, gender differences play a prominent role in the enhancement of psychological skills of athletes participating in different sports. Thereby, the analysis of psychological skills of male and female athletes participating in different sports is necessitated to understand the gender difference and nature of activity in developing the psychological skills. The main aim of this investigation was to analyze the selected psychological skills (achievement motivation and competitive anxiety) of male and female participants in different sport domains.

Methodology

In this study, 320 sportsperson from different sport domains (individual and team sports) were selected as subjects from Guntur district, Andhra Pradesh, India. The subjects selected in the domain of individual sports consist of 74 male and 58 female sportsperson, whereas, 105 male and 83 female sportsperson considered as subjects from that of team sports. The subjects selected were position holders in the district level tournament in respective sports. The age of the subjects were ranged between 18 and 21 years. The participants in athletics, badminton, table tennis, tennis, power

lifting, and weight lifting were considered to be as subjects categorized as individual sports in this study, while the basketball, cricket, football, handball, hockey, kabaddi, khokho, and volleyball players were considered as subjects belonging to team sports. These sports of different domains were chosen considering the popularity and achievement of the sportsperson in State level tournaments.

The selected subjects were tested for their level of achievement motivation and competitive anxiety using standardized instruments. The data collected were subjected to statistical analysis by means of Two-way ANOVA, and simple effect test. The confidence interval was fixed at $p < 0.05$ in all cases.

Results

The data on achievement motivation and competitive anxiety were analysed for statistical significant gender difference and the influence of participating in individual and team sports. And all those results were tabulated in tables from 1 through 6.

Table 1: Mean and Standard Deviation on Achievement Motivation among Sportsperson of different Sports Domain.

Gender	Sports Domain	Mean	Std. Deviation	N
Male	Individual Sports	26.689	3.420	74
	Team Sports	24.962	3.905	105
Female	Individual Sports	25.431	3.550	58
	Team Sports	27.289	2.878	83

It is obvious from Table-1 that female has more achievement motivation than their counterpart irrespective of their sports. Furthermore, it is observed that participants in individual sports are highly motivated to achieve compared to those engaged team sports.

The data on achievement motivation have been analyzed by two-way analysis of variance to determine the gender difference and the influence of participation in different sports domains, and the obtained results are presented in Table-2.

Table 2: Two-way Analysis of Variance on Achievement Motivation.

Source	Sum of Squares	df	Mean Square	F	Sig.
Gender	21.843	1	21.843	1.799	.181
Sports Domain	.327	1	.327	.027	.870
Gender * Sports Domain	245.670	1	245.670	20.232	.000
Error	3836.983	316	12.142		

It is observed from Table-2 that the achievement motivation between gender (male and female) irrespective of sports domain is $F(1, 316) = 1.799$, ($p = 0.181$), which indicates that no significant differences exist between male and female irrespective of sports domain (individual and team sports) on achievement motivation. Moreover, the achievement motivation between sports domain (individual and team sports) irrespective of gender is $F(1, 316) = 0.027$, ($p = 0.870$), which indicates that no significant differences exist between individual and team sports irrespective of gender on achievement motivation.

But, the obtained $F(1, 316) = 20.232$, ($p < 0.05$) value for the two-way interaction of gender (male and female) and sports domain (individual and team sports), reveals a significant difference on achievement motivation. It establishes the existences of significant differences in the two way interaction effect on achievement motivation. Since, the interaction effect is significant, the simple effect test has been applied as follow up test and it is presented in Table-3.

Table 3: The Simple Effect Test on Achievement Motivation among Sportsperson of different Sports Domain.

	Sum of Squares	df	Mean Squares	F ratio	Sig.
Gender and Individual Sports	51.470	1	51.470	4.239	.040
Gender and Team Sports	251.071	1	251.071	20.677	.000
Sports Domain and Male	129.508	1	129.508	10.666	.001
Sports Domain and Female	117.879	1	117.879	9.708	.002
Error	3836.983	316	12.142		

Table-3 reveals that statistically significant difference on achievement motivation exists between male and female sportsperson participating in individual sports, as the obtained $F(1, 316) = 4.239$, ($p < 0.05$). Likewise, considerable difference on achievement motivation between male and female sportsperson participating in team sports is observed, as the obtained $F(1, 316) = 20.677$, ($p < 0.05$). It also shows that there is a statistically significant difference on achievement motivation between individual and team male sportspersons as the $F(1, 316) = 10.666$, ($p < 0.05$), per se, considerable difference on achievement motivation exists between individual and team female sportspersons as the $F(1, 316) = 9.708$, ($p < 0.05$).

Table 4: Mean and Standard Deviation on Anxiety among Sportsperson of different Sports Domain.

Gender	Sports Domain	Mean	Std. Deviation	N
Male	Individual Sports	19.649	3.677	74
	Team Sports	20.391	2.669	105
Female	Individual Sports	15.862	3.247	58
	Team Sports	18.349	2.662	83

It is obvious from Table-4 that male are more anxious than female irrespective of their sports. Furthermore, it is observed that participants in team sports are highly anxious compared to those play individual sports.

The data on anxiety have been analyzed by two-way analysis of variance to determine the gender difference and the influence of participation in different sports domains, and the obtained results are presented in Table-5.

Table 5: Two-way Analysis of Variance on Anxiety

Source	Sum of Squares	df	Mean Square	F	Sig.
Gender	649.028	1	649.028	70.488	.000
Sports Domain	199.275	1	199.275	21.642	.000
Gender * Sports Domain	58.226	1	58.226	6.324	.012
Error	2909.619	316	9.208		

It is observed from Table-5 that the anxiety between gender (male and female) irrespective of sports domain is $F(1, 316) = 70.488$, ($p < 0.05$), which indicates that significant differences exist between male and female irrespective of sports domain (individual and team sports) on anxiety. It also shows that the anxiety between sports domain (individual and team sports) irrespective of gender is $F(1, 316) = 21.642$, ($p < 0.05$), which indicates that significant differences exist between individual and team sports irrespective of gender on anxiety. Furthermore, the obtained $F(1, 316) = 6.324$, ($p = 0.012$) value for the two-way interaction of gender (male and female) and sports domain (individual and team sports), reveals a significant difference on anxiety.

A finding of the study establishes the existences of significant differences in the two way interaction effect on anxiety. Since, the interaction effect is significant, the simple effect test has been applied as follow up test and it is presented in Table-6.

Table 6: The Simple Effect Test on Anxiety among Sportsperson of different Sports Domain.

	Sum of Squares	df	Mean Squares	F ratio	Sig.
Gender and Individual Sports	466.208	1	466.208	50.633	.000
Gender and Team Sports	193.121	1	193.121	20.974	.000
Sports Domain and Male	23.888	1	23.888	2.594	.108
Sports Domain and Female	211.229	1	211.229	22.941	.000
Error	2909.619	316	9.208		

Table-6 shows that there is a statistically significant difference on anxiety between male and female sportsperson participating in individual sports, as the obtained $F(1, 316) = 50.633$, ($p < 0.05$). Per se, considerable difference on anxiety between male and female sportsperson participating in team sports is noticed, as the obtained $F(1, 316) = 20.974$, ($p < 0.05$). However, it also demonstrates that statistically significant difference on anxiety didn't exist between individual and team male sportspersons as the $F(1, 316) = 2.594$, ($p = 0.108$), whereas, considerable difference on anxiety exists between individual and team female sportspersons as the $F(1, 316) = 22.941$, ($p < 0.05$).

Conclusion

The research findings of this study imply that difference in gender and participation in different sport domains contributes to the variation in developmental process on achievement motivation and anxiety.

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Role of Naturopathy in Diabetes

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ABSTRACT

Introduction

The term naturopathy was not coined till the 19th century, but its philosophical root; can be traced back to Hippocrates. It is a system of health-oriented medicine that stresses maintenance of health and prevention of disease. The average average individual has an unhealthy, disease-promoting lifestyle. The medical doctors' drugs and surgery methodology never addresses this underlying factor. Naturopathic physicians, on the other hand, are trained to find the underlying cause rather than treating or suppressing the symptoms. Naturopathic doctors don't wait for disease to progress before they institute appropriate preventive measures.

Philosophy:

Vis medicatrixnaturae - The healing power of nature. Fundamental to the practice of naturopathic medicine is a profound belief in the ability of the body to heal itself, given the proper opportunity. Naturopathic doctors use the least invasive intervention that will have the desired therapeutic effect. This philosophical approach necessitates a broad range of diagnostic and therapeutic skills and accounts for the eclectic interests of the naturopathic profession.

Although the profession has evolved into a primary healthcare system providing services from natural childbirth and family practice through to preventive and therapeutic medicine, the principles are still the same - education of the patient in the laws of healthy living, support of the body's own healing abilities and the use of natural and non-toxic therapies. Key to the success of naturopathic treatments is the high level of involvement of patients in their own healing process. Naturopathic medicine is holistic in its approach. Life is viewed as more than just the sum of biochemical processes, and the body is believed to have an innate intelligence that is always striving for health.

Lifestyle modification is crucial to the successful implementation of naturopathic techniques - health does not come from a doctor, pills or surgery, but rather from the patient's own efforts to take proper care of him or herself. Unfortunately, our society expends considerable resources inducing disease-promoting habits. While it is relatively easy to tell a patient to stop smoking, get more exercise and reduce their stress, such lifestyle changes are difficult in the context of peer group pressure, habit and commercial pressure. The naturopathic doctor is specifically trained

to assist the patient in making the needed changes. This involves many aspects: helping the patient acknowledge the need; setting realistic, progressive goals; establishing a support group of family and friends, or of others with similar problems; identifying the stimuli that reinforce the unhealthy behavior; and giving the patient positive reinforcement for their gains.

Diabetes, or Diabetes Mellitus to give it its proper medical name, is a disorder of assimilation. When the pancreas becomes inactive or atrophied and ceases to produce insulin, the body is unable to convert the sugar into energy for the muscles. Its chief symptoms are weakness and loss of weight, great thirst and increase in the amount of urine passed there is sometimes voracious appetite but the patient gradually becomes more and more emaciated.

Owing to poor vitality of the tissues, various skin eruptions like boils and carbuncles appear. There may be itching in the groins and eczema, a serious complication could be gangrene of the skin of the feet, beginning with the toes. A curious phenomenon is that the younger patient, the more rapid is the course of the disease.

As in the cases of other diseases, naturopathy recommends a diet and no drugs. The main purpose is to help the body to assimilate the sugar into the system and that can be achieved by a special diet. I would recommend about one kilo of curd made from cow's milk and various types of gourds without salt. The greener the vegetables, the more beneficial would be. Sour fruits like tomatoes, oranges, pineapples, rose apple, solanum could be taken with advantage. The patient can also take one or two chapatis made of flour which has not been passed through sieve. The person suffering from diabetes must take long walks daily. Remember that the disease strikes generally those who lead a sedentary life, and are used to rich diet poor in nutrition.

Cereals, sugar and sugary preparations should be avoided for some time. The other method of treating the disease is by fasting for a couple of days then eating sour fruit only for a week during which green vegetables may also be alternated with the fruits. Curd made from cow's milk must be inevitable part of every meal. If the curd is not available, about 50-gm of germinated gram may be taken with every meal. After about a fortnight of this regimen, the patient can take bread made of whole flour. During the period of fasting, lukewarm enema should be taken every day.

Diabetics must take physical exercise as that helps to utilize the blood sugar, walking, jogging is the best exercise i would recommend. Hip bath is extremely beneficial in this case of diabetes, particularly for patients suffering from constipation. For lathery skin most diabetics develop, the best exercise is vigorous rubbing of the skin with rough towel for fifteen minutes before bath with cold water. A diabetic must also try yoga and must always try to remain cheerful and keep his poise.

Diabetes is believed to be an incurable and lifelong disease. According to Yoga and Naturopathy it is a usual metabolic disorder chiefly related to digestive system & functions of liver, though it is commonly believed as a disorder of the pancreas. The beta cells in the islets of Langerhans of the pancreas are the direct area of production of insulin that controls glucose metabolism. Either due to damage of these cells, quality of insulin produced may go poor or the quantity of insulin produced may go lesser that leads to excess glucose level in the blood. Whatever may be the cause of or course of the disease it generally brought to control only by a healthy life style. Medicines will not help unless the patient follows a healthy way of living and the most of the time strict observance of a healthy life style helps to avoid medication.

Treatment

The goal of treatment in diabetes is to reduce high level of glucose in the blood stream. The aim of the treatment is to remove the cause of the disease and building the well-being of the patient.

Fasting & Diet Therapy

Fasting in diabetes is commonly believed as contraindicated whereas fasting therapy is the best cleansing treatment used in Naturopathy. Intermittent fasting is advised for the diabetic patients under the supervision of an expert nature cure physician. The patient has to be prepared physically and mentally ready to undergo fasting. Initially it is not prescribed, but after preparation of 1-2 weeks it can be tried. Fasting on water and limited supply of coconut water can be tried in the treatment of diabetes.

An alkaline diet rich in complex carbohydrate & fibre and low fat is recommended because they tend to slow absorption, helping to avoid a rapid rise in blood glucose.

A well balanced diet including Fruits (avoid banana, custard apple, black grapes, dates, pineapple, mangoes), Vegetables (take the following vegetables in limited quantity-potatoes, beet root, sweet potatoes, yam, tapioca, broad beans, double beans, cluster beans), sprouts, whole grains, legumes should be embarked upon following the fasting therapy.

Include raw foods exclusively as it is rich in essential enzymes, which increases the metabolism and are the good source of vitamins and minerals which are essential for diabetics.

The use of Fenugreek seeds in daily meals is especially beneficial. Even sprouted Fenugreek or one teaspoon of Fenugreek powder may be taken very day.

Include green leafy vegetables, soya ground nut, tomatoes, and sprouted Bengal gram to your diet.

The juices of Jamun, Bitter gourd, Cucumber and bottle gourd are also helpful.

Note;-

Avoid cooked starchy food, as it gets quickly absorbed in the system and raises the sugar level in the body, Hydrotherapy plays a vital role in improving the metabolic rate and controlling the blood sugar level. A warm water enema cleanses the accumulated toxins from the colon, thereby detoxifies the system. Other treatments include Hip bath, immersion bath, Foot and Arm bath, steam bath, Gastro hepatic pack, hot and cold compress over abdomen, abdomen pack etc. These treatments enhance the capability of the muscles to utilize the blood sugar and increase blood flow to the muscles and provide better sleep.

Whereas raw starchy food doesn't get absorbed quickly in the system. Non vegetarian foods, fried, oily, white flour foods, alcohol & smoking are to be completely avoided.

Hydrotherapy

Hydrotherapy plays a vital role in improving the metabolic rate and controlling the blood sugar level. A warm water enema cleanses the accumulated toxins from the colon, thereby detoxifies the system. Other treatments include Hip bath, immersion bath, Foot and Arm bath, steam bath, Gastro hepatic pack, hot and cold compress over abdomen, abdomen pack etc. These treatments enhance the capability of the muscles to utilize the blood sugar and increase blood flow to the muscles and provide better sleep.

Mud Therapy

Mud therapy helps to correct the imbalance of the digestive and endocrinal organs, which remain under -active in diabetic patients resulting in accumulation of toxins. Full Mud bath is the best way to eliminating the toxins. Direct mud or mud pack on the abdomen are also found beneficial in this treatment. It increases the circulation, relieves inner congestion and elimination of morbid matter.

Massage Therapy

Massage otherwise called a passive exercise is highly beneficial for improving the activities of circulatory, musculature, lymphatic & nervous system. It reduce the muscle tension and reduces the stress. Pancreatic massage proves to be beneficial in this condition.

Yoga Therapy

Along with well-balanced diet and nature cure treatment, Yoga should be done for good control of blood sugar level. Asanas, specifically useful to improve functions of the liver, digestive system and pancreas are beneficial in treating diabetes. Merudantasna (utthitapadasana), Vipareeta karani Mudra, Halasana, Vakrasana, Surya

Namaskar, Kati Chakrasana, Udhva Hstottansana, Pada hastasana, Trikonasana, Pavanamuktasana, Chakrasana, Sarvangasna, Bhujangasana, Dhanurasana, Vajrasana, Ardha Matsyendrasana, Ushtrasana, Paschimottanasana, Mandukasna, Mayurasana, Matsyasana, Shavasana & sukhshma Vyayamas in case of obesity patients are beneficial.

Kriyas

Neti, Vaman or Vastra dhauti, Kapalbhanti, Nauli and Agnisara are also highly beneficial.

Pranayama

Anulom-Vilom, Ujjayi, Bharamari (minimum 10 rounds of each), Bhastrika and Suryabhedana Pranayama give much benefit.

As tension is always associated with these patients, practice of relaxation techniques and Meditation (10 to 20 minutes) will be of great use.

Walking & Exercise

A study done by New Castle University has shown that a 45 minutes daily walk can help to control sugar and helps your cells accept insulin more efficiently. Regular exercise is important as part of a healthy life style. It greatly increases the expenditure of blood glucose as it is used while activity.

Sun Bath

For better metabolic activity, sun bath for 20-40 minutes in the morning daily. Similarly, it should be done to the abdomen just below the left rib cage, the North Pole in the front and the South Pole opposite at the back for 15 minutes in the evening. In addition to that magnetized water should be taken four times daily.

Chromo Therapy

Diabetes is treated by using yellow and green colours. Yellow colour stimulates the pancreas and green colour stimulates the thyroid gland which helps in elimination of toxins. Stress increases the body's production of adrenalin, which raises the blood sugar level. Reducing stress through Naturopathic treatments and Yoga will help to restore regular, healthy sleeping pattern which will help to keep the blood sugar level in control.

A Comparative Study of Health Consciousness Among The Students of Private & Government School of Haryana

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Research scholar department of physical education CDLU, Sirsa

ABSTRACT

The purpose of the Present study was to find out the comparison of Health consciousness among the students of private and government school of Haryana. The study was conducted on 50 male students (25 each) of private and government school. The age ranged between 13 to 18 years. Monitoring and Energy Factor was tested through (Health consciousness Scale, Made by N.V.V.S Naryana) (March 2009) standardized data was analysis by "t" test. After comparing of the present data it was found that Private school student have better in Monitoring and Energy Factor was same than Government school students. In the end of the study we can says that Private school students have more effects on Monitoring and Energy Factor.

Keyword;

Health, Private School, Government School, Monitoring Factor, Health Consciousness

Introduction

Health, like love or happiness, is a quality of life that is difficult to define and virtually impossible to measure. Health is defined differently among experts, but all delimitations have a common theme: Self responsibility and adopting a healthy life style. Ask people what they mean by Being healthy or Feeling well we probably will get variety of answer. Most people usually think of health as the absence of disease. But what about sometime who has a relatively harmless genetic disprder, such as an etra toe. Health is the level of functional or metabolic efficiency of a living organism. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury orpain (as in "good health" or "healthy"). The World Health Organization (WHO) defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Although this definition has been subject to controversy, in particular as lacking operational value and because of the problem created by use of the word "complete," it remains the most enduring. Other definitions have been proposed, among which a recent definition that correlates health and personal satisfaction. Classification systems such as the WHO Family of International Classifications, including the International Classification

unctioning, Disability and Health (ICF) and the International Classification Diseases (ICD), are commonly used to define and measure the components of th.

pose of the Study

A Comparative Study of Health Consciousness among the Students of ate and Government School of Haryana

hodology

To achieve the objectives of the Present study 100 male and female students rivate and government school of Haryana. The Age ranged between 13 to 18 s constituted the subjects of the study. The data was collected by(Health consciousness Scale, Made by N.V.V.S Naryana) (March 2009).The dardized data was statistically analyzed by "t" Test method.

ult & Discussion

le 1: Comparison of monitoring factor of health consciousness among private school and government school boys.

Players	N	Mean	SD	SED	"t" ratio
Private school	25	30.14	5.38	6.62	2.50
overnment school	25	27.38	4.44	0.76	

nificant at 0.05 level

It is evident from the table that private school students have more batter in nitoring factor of health consciousness. The mean score of private school student 30.14 where as in government school student it was 27.38. The SD was 5.38 4.44 and SED was 0.62 and 0.76 the "t" value was 2.50.

Figure-1

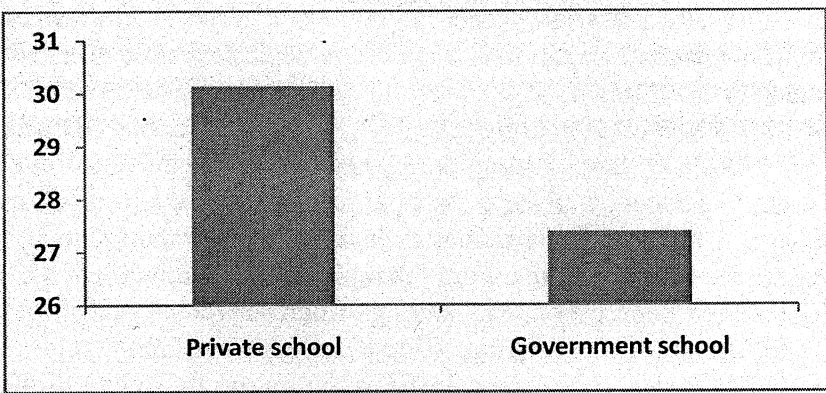
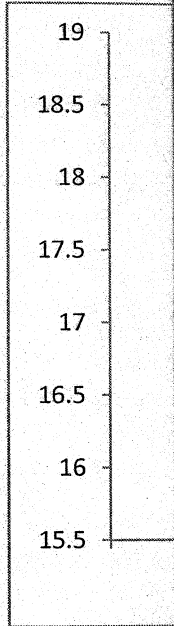


Table 2:

Players
Private sch
Government s

Significant at

It is ev
Energy factor
18.72 where as
and SED was 0



Acknowledger

The res
Professor Depa
his valuable in
carrying the sa
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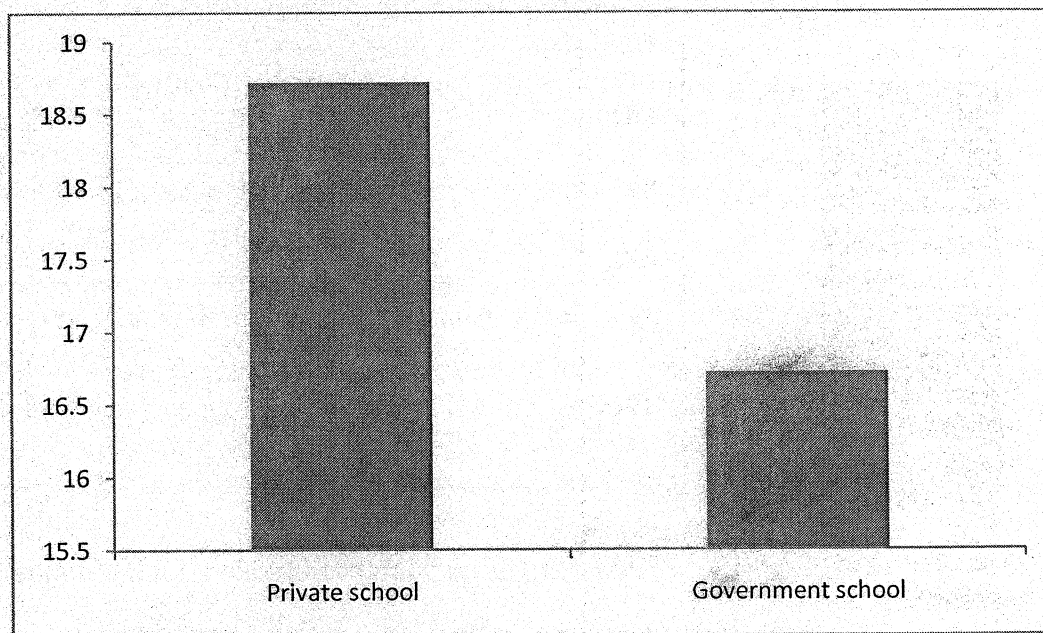
Table 2: Comparison of Energy factor of health consciousness among private school and government school boys.

Players	N	Mean	S.D	SED	"t" ratio
Private school	25	18.72	3.13	0.44	3.061
Government school	25	16.72	2.95	0.41	

Significant at 0.05 levels

It is evident from the table that private school students have more batter in Energy factor of health consciousness. The mean score of private school student was 18.72 where as in Government school student it was 16.72The SD was 3.13and 2.95 and SED was 0.44and 0.41the't' value was3.061

Figure-2



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Conclusion

It is evident from the study, that private school boys have better in monitoring factor and energy factor of health consciousness among private school and government school boys.

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Health Problems of Female Athlete : Causes and Management

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ABSTRACT

Introduction

Sports and exercise are part of a balanced, healthy life style. People who play sports are healthier; get better grades; are less likely to experience depression; and use alcohol, cigarettes, and drugs less frequently than people who are not athletes. Sports and exercise are healthy activities for girls and women of all ages but for some girls, not balancing the need of their bodies and their sports can have major consequences. Occasionally, A female Athlete who focuses on being thin or light weight may at too little or exercise too much. Doing this can cause long -term damage to health, or even death. It can also hurt athletic performance or make it necessary to limit or stop exercise. Some Girls who play sports or exercise intensely are at risk for a problem called female athlete triad. Female Athlete triad is a combination of three conditions: disordered eating, amenorrhea and osteoporosis. A Female athlete can have one, two, or three parts of the triad.

Females in any sport can develop one or more part of the triad. At greatest risk is those in sports that reward being thin for appearance (such as figure skating or gymnastics) or improve performance, (such as a distance running or rowing)

Fashion trends and advertising obtain encourage women to try to reach unhealthy weight levels. Some female athletes suffer low self - esteem or depression, and may focus on weight lost because they think they are heavier than they actually are. Others field pressure to lost weight from athletic coaches or parents.

Female Athletes should consider these questions:

- Dissatisfied with body structure
- Strive to be thin
- Continuously focus on weight

If the answers are yes, then she may be at risk for developing abnormal patterns of eating food (disordered eating), which can lead to menstrual dysfunction and early osteoporosis.

Three interrelated illnesses may develop when a girl or young woman goes to extremes in dieting or exercise. Together, these conditions are known as the "Female Athlete Triad".

Female Athletic Triad:

1. Disordered Eating

Although they usually do not realize or admit that they are ill, people with disordered eating have serious and complex disturbances in eating behaviors. They are preoccupied with body shape and weight and have poor nutritional habits.

Females are five to ten times more likely, to have disordered eating compared with males, and problem is in especially common in females who are athletic. The illness takes many forms. Some people starve themselves (anorexia nervosa) or engage in cycles of overeating and purging (bulimia).

Other severely restricts the amount of food they eat, fast for prolonged periods of time or misuse diet pills, diuretics, or laxatives. People with disordered eating may also exercise excessively to keep their weight down.

Disordered eating can cause many problems, including dehydration, muscle fatigue and weakness, and erratic heartbeat, kidney damage, and other serious condition. Not taking in enough calcium can lead to bone loss. It is especially bad to lose bone when you are a child or teenager because that is when your body should be building bone. Hormone imbalances can lead to more bone loss through menstrual dysfunction.

2. Menstrual dysfunction

Athletic amenorrhea, or exercise- associate amenorrhea, is a diagnosis of exclusion, which means that other medical causes- pregnancy, thyroid or other endocrine disorders, excess of male hormones (androgens), a pituitary tumor (prolactinoma), polycystic ovarian syndrome, and genetic abnormalities must be ruled out. Based on the history and physical examination, a physician can order appropriate blood-test and other investigation.

There is no single cause for the onset of athletic amenorrhea. Potential factors include low body weight and low percent body fat, rapid weight loss, sudden onset of vigorous exercise, nutritional deprivation, disorder eating and energy imbalance, as well as psychological and physical stress. Suppression of the reproductive cycle is different in each individual.

Sports that emphasize leanness (such as strenuous endurance sports or aesthetic sports) are most likely to have a high percentage of athletes with menstrual disorder. For example, the prevalence of amenorrhea in runner (24 to 26%) has been shown to be higher than in swimmer(12%).

Genetic predisposition may also be important. The beginning of competitive sports at an early age was previously thought to delay menarche. It is more likely, however, that females who are late maturers are more specifically selected for certain sports and discipline.

Higher intensity exercise and increased frequency of training are associated with a greater incidence of menstrual disorder, but there is no scientific evidence for a direct cause and effect. Metabolic alteration and change in the body composition such as weight loss and decrease percent body fat are coincidental rather than causative. A positive energy balance (consuming enough calories for the amount of exercise performed) seems to be critical for maintaining ovulatory cycles. Nutritional deprivation may also result in deficits of calcium, iron, and other important nutrients. Women with amenorrhea should consume the equivalent of 1500 mg of elemental calcium daily to protect their bone density.

Psychological and emotional factors, as well as stress, play a role as well in the development of menstrual cycle disorders. In some sports, the tendency of coaches, parents, and judges to focus on body composition and percent body fat create an unhealthy preoccupation with body image.

3. Premature Osteoporosis (low bone density for age)

Lack of periods disrupts the body's bone-building processes and weakens the skeleton, making bones more likely to break. Bone tissue wears away, making your skeleton fragile. Low bone mass puts you at increased risk for fractures. Skeletal problems is most deleterious, risk is the impact on the skeleton, in particular osteoporosis and its secondary clinical effect, stress fractures and regular fractures. Although loss of bone in chronically hypo estrogenic athletes with secondary amenorrhea is a well recognized problem, a significant issue is the failure to reach peak bone mass, particularly in athletes with delayed menarche. This phenomenon is probably a combination of genetics, intensive exercise and negative energy balanced. These adolescents will enter adulthood with what may be an irreversible bone mass deficiency and possibility increased fractures throughout their lives. Unfortunately neither high calcium intake nor physical activity compensate for the lack of bone mass accretion in late maturing adolescents. Recent work suggests that this deficiency may be more pronounced in the spine than in the hips. However stress fractures that are related also to a delay in menarche occur predominantly in weight bearing cortical bone (tibia, metatarsal, fibula, and femur) and not trabecular bone. Risk of fracture is probably associated with bone density, but other factors may be operative (bone quality, total mass, training intensity, technique and biomechanical factors).

Treatment:

Treatment for female athletic triad often requires help from a team of medical professional including doctor (pediatrician, gynecologist, family physician), athletic trainer, a nutritionist and a psychological counselor. It is important to measure bone density, follow athletes with amenorrhea or fracture, and counsel them about their diets, fluctuations in weight, calcium intake, and in particular, the importance of keeping weight near normal levels and trying to lower exercise levels. Replacement of hormones is probably indicated, although hormone replacement therapy (HRT) in doses used for replacement in the menopausal years has not been effective in increasing bone mass. However, HRT may protect against further bone loss. Oral contraceptives have been helpful although more studies are needed and, in this young group, higher doses than used for the post-menopausal women may be needed. Young women during their reproductive years maintain higher levels of estrogen than that seen with HRT, suggesting that higher doses of hormones are necessary. Additionally athlete may have poor diet and not be exposed to sunlight, so vitamin D should be added to calcium intake. If the bone loss involves a leptin pathway, other therapeutic modalities may be necessary. Until mechanisms are understood, preventive measures involve nutritional and behavioral changes. Certainly bulimic behavior and severe fasting should be avoided.

Suggestive measure to be taken

Here are a few tips to help teen athletes stay on top of their physical condition:

- ❖ Keep track of your period. Like Calendar mark down when periods start, stops, bleeding light or heavy etc..
- ❖ Don't skip meals or snacks between schools, college, practice, competitions. Eating will improve performance, so stock locker or bag with quick and easy such as fruits, dry fruits, seeds, raw vegetables, portion bar, string cheese etc..
- ❖ Visit a dietitian or nutritionist who works with teen athlete. He/she can help athletes to get their dietary game plan into gear and find out whether individual is getting enough such as iron, calcium, and protein.
- ❖ Do it... Pressure from teammates, parents, coaches can turn activity into a nightmare. If you are not enjoying your sport, make a change. It's your body and your life.

Overall, the health risks of the athletic female include psychological, reproductive, and skeletal disturbances. These problems appear to be reversible but are often difficult to detect without heightened awareness. The mechanism is unclear, and more research is necessary.

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Yoga, Physical Education & Sports are Essence for Health and Wellness in the Modern Life of 21st Century

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ABSTRACT

The present 21st century is the century of science and technology while both the science and technology have a huge effect to change the world with a lot of inventions and providing of abundance facilities to the mankind. In true sense science and technology have made a crystallized shape of this society by facilitating its human beings and made lives much colourful. Therefore, human lives have been of machinery dependant and effortless side by side having a shelter of many hypo-kinetic diseases like diabetes, obesity, hypertension, cardio-vascular, psychosomatic diseases. Presently people all over the world suffer from many of such hypo-kinetic diseases. India is not out of that event. Thus it has become extremely necessary to participate in the physical activities. Yoga, Physical Education and sports are such ways to help the people to remain healthy, fit and wellbeing in the world of stress, strain and inactive lifestyle. Yoga is a practice in which there is a lot facility can be available first up of all it can be practiced at any time even during the leisure time of works, in this practice there is no requirement of equipments, no requirement of enough space, and no need of partner, there is no expense of practice. Yoga poses strong the muscles, make flexible the body, develops blood circulation, and helps in secretion of hormone from different glands of the body in balanced conditioned. In yogic practices, there is a harmonious development of all the muscles of the body, internal organs, nerves and frame. Yogic practices cure many diseases. Pranayam the other parts of yoga culture bring beneficial changes in breathing capacity and develops capacity of cardio-respiratory system. Meditation makes strong our minds, a depth of mind developes. By it the mind is expanded. The meditation practice time should be at least of 10-15 minutes and there should be resting period of 5-10 minutes. During meditation thinking about God or an object should be a matter of thinking. Physical Education and Sports on the other hand help people to keep them active, prevent diseases, keep away from stress, strain and anxiety and make a sound mind in sound body to live most in the modern life of 21st century with its different outdoor and indoor activities.

Key words: Modern life, Sports, Physical Education, Yoga, stress, strain, anxiety

Introduction

Man has made remarkable progress in almost every walk of the life. Modern scientists, researchers have enormously changed the life-style. The pollution of air, water, soil, sound body and mind is also the result of science; the machinery and tool dependent life style makes declining human values day by day in the modern life. Stress, strain and anxiety are the causes of physical as well as mental distraction. Hence it has become extremely necessary for the mankind to participate in different physical activities. However, Yoga, Physical Education and Sports are those different successful ways to get rid of from those hazards. Researchers have proved that yoga has surest remedies for man's physical as well as psychological ailments. It makes the organ of the body active in their functioning and has good effect on internal functioning of the body. So it has the prime necessity of Yoga to keep people healthy, wellbeing and fit. Yoga, the word which has been derived from the Sanskrit word 'Yoke' that means union. It is the union of the three i.e. of body, mind and spirit. It has been proved that yoga gives better result than medical science for the treatment of certain diseases like psycho-somatic disease, where the body and mind are involved. Besides, Yoga, Physical Education and Sports have positive effect to bring people out from the possibility of hypo-kinetic diseases and to keep people active, healthy, fit and wellbeing by providing them many outdoor and indoor activities and bound to participate basically in the modern life of 21st century.

What is Yoga? The word yoga is derived from Sanskrit word "Yuj" which means to join, to attach, to bind and to yoke, 'yoke' means uniting the individual spirit with the universal spirit or God and to concentrate on one's attention. 'Yoke' means union. It is the union of our will with the will of God. It is the union of body, mind and spirit. Yoga is one of the most important ancient nomenclatures of physical activities. The main aim of yoga is control over the mind and to keep fit one by its asanas, pranayam and meditation. The stages of yoga are Yama, Niyama, Asana, Pranayam, Pratyahara, Dharana, Dhyana and Smadhi. There are eight types of yoga. These are Karma Yoga, Jnana Yoga, Hatha Yoga, Raj Yoga, Mantra Yoga, Laya Yoga and Bhakti Yoga. The eminent yogi Rishi Patanjali said if few practices of Yoga are regularly done then there may be a chance of healthy life. The origin of yoga is about 5000 years back in India. Yoga experts say yoga can positively affects body, mind and spirit. However, yoga is excellent for its uniqueness of less requirement of space, time and no warm up and no cost for practices and that is why it is so much popular now a day.

What are the rules for practicing of yog asanas: There is a basic rule for practicing of Yoga. A novice should follow up the under mentioned rules to have the effective benefits of Yoga in the present era. On the clean, noiseless and level ground yoga should be practiced. On the ground there should be a mat or carpet on which Yoga should be practiced. Morning time is the best for practicing Yoga, clothes for men should be shorts, light ganji and for women stretchable pant and loose blouse, a silence

to be maintained during practice, concentration is necessary for all round development, concentration should be on breathing and on limbs which have a stress or strain, savasana should be done before starting the next yogasana to make breathing normal, during practice no force or jerk should be exerted, the practice time should be gradually increased and number of asanas may be increased gradually, after each asana slowly to be gone on the next. Yoga may be practice under the guidance of experts. Yoga should not be practiced on heavy stomach, should not be practiced during fever or suffering from a severe disease, or after beginning and immediate delivery in case of women,

What are the importances of yogasanas in the modern life? Yogasanas are extremely necessary now a day to remain fit, healthy and well being. The importances of yogasanas are immeasurable few are as follows yogasanas give sufficient exercise to the internal organs of the body for which a person can maintain good health and longevity of life, almost no equipment is required for practice, no companion is required for practice, yogasanas help to clam our physical and mental status, help to control senses, yogasanas help to acquire resistance in the body and prevent diseases, yogasanas are not expensive, yogasanas make the spinal cord and body flexible, one looks younger and lives longer, blood in blood vessel becomes purified with the practice of different yogasanas, yogasanas build up a morality as it a non-violent activity, yogasanas, stimulate different glands of the body, which helps the body to acquire a well-balanced growth, few diseases such as constipation, gas trouble, diabetes, blood-pressure, headache these hypo-kinetic diseases can be cured by practicing yogasanas. Experts say yogasanas also make possible intellectual and spiritual development. In yogasanas there is no restriction of age and sex hence one can enjoy sound health through yogasanas for a long time. Yogasanas reduce fatigue and calm the nerves hence protect the hazards of strain, stress and anxiety of modern life.

Yogasanas and cure of diseases: It has proved yogasanas can cure some diseases. Yoga experts name such diseases for curative reasons. Through yogic practices there is possible of gentle stretching of the muscle, massaging of internal organs and toning the nerves throughout the body hence many diseases, even the so-called incurable can be eliminated or eased. Experts say that in fact yoga gives better result for some long standing diseases and incurable diseases. The advantage of yoga treatment is it is an auto-treatment method. Here are some diseases experts say these can be cured by the regular practice of yogasanas which are mentioned below diabetes, pain in eyes, ear and nose, T.B. & Asthma, etc. can be cured by siddhasana, sarvangasana, matsyendrasana, ardha matsyendrasana etc., chronic bronchitis, cough and difficulty in breathing can be cured by matsyasana and shalabhasana, disorder of digestive system may have a good effect with the asanas like sarvangasana, vajrasana, paschimottanasana and padmasana etc., dysentery can be cured by padmasana and

kukkutasana, piles, can be cured by siddhasana, paschimottanasana, sheershasana. Chronic constipation can be cured by halasana, mayoorasana, dhanurasana, matsyasana. Pascimottanasana, mayoorasana, dhanurasana, ardha matsyendrasana, suptavarjrasana etc. are effective for fatness. For high blood pressure the effective yogasanas are vajrasana. siddhasana, padmasana, matsyendrasana, shavasana etc. Sarvangasana, halasana, vajrasana, padmasana, siddhasana and Pascimottanasana are effective in low blood pressure. In headache the effective yogasanas are Paschimottanasana, halasana, sarvagasana, and savasana. In this way there are many diseases which can be cured by yogasanas.

What is pranayam? The meaning of pranayam is control and regulation of breath. From the sanakrit word 'prana' the pranayam has derived. 'Prana' means vital force. By it also understood life or breath. Ayana means the control of prana so pranayam means the control of the vital force by concentration and regulated breathing. There are eight types of pranayam. These are as follows surya bhedana pranayam, ujjayi pranayam, sheetkari pranayam, sheetali pranayam, bhastrika pranayam, bharmri pranayam, moorcha pranayam, kapalabhaati pranayam, sama vrtti pranayam, nari sodhana pranayam, plavini pranayam etc. these all types of pranayam have some positive effects on the body. However, the objectives of pranayam are to inspire, motivate and regulate and balance the vital force prevailing in the body. It cleans the body and knowledge is manifested. It is called the soul of yoga. It is necessary for purifying the mind. The objective of pranayam is to strengthen the nervous system also to increase the concentration power of the mind. There are some important components of pranayam are puraka means to inhale, rechaka means to exhale and kumbhaka means to retain the breath.

What are the physiological values of pranayam? Each and every type of pranayam has some positive physiological value in our body few of those have been mentioned below. Pranayam soothes the nerves and the entire system, it increases the digestive power, refreshes the nerves and cleans the sinuses, blood is able to receive a larger supply of oxygen, one feels refreshed, the nerves are calmed and purified. It activates and invigorates the liver, spleen, pancreas and abdominal muscle, the sinuses are drained and the eyes feel cool, pranayam cools the system and soothes the eyes and ears. It benefits persons suffering from low blood pressure and high blood pressure. It keeps the body fit and healthy. One can live a long life with pranayam. It improves the power of memory and eliminates mental disorder. It purifies tabular channels and removes lethargy from the body. The constant practice of pranayam strengthens the nervous system; the mind becomes calm and capable of concentration, it rouses spiritual power.

It gives spiritual joy, spiritual light and mental peace. It cleans the skull, the respiratory system and nasal cavities. It eliminates the cough accumulated in the wind pipe, and cures the asthma, it tones up the heart and activates the respiratory system,

and it purifies the blood. Through practicing of different kinds of pranayam there is regulation of breathing control, a pressure is created on the important organs like on the lungs, heart hence these organs are strengthen and keep away from the harm of stress, strain and anxiety.

What is the importance of meditation in the modern life? Meditation is such a practice by which a concentration can be developed. In this practice mind is keep set up to thinking in a specific matter. Thinking about God or an object is the matter of thinking. Concentration period should be of 10-15 minutes. After this a rest of 5-10 minutes is followed. Through meditation mind is expanded and a depth of mind is possible. Hence stress, strain and anxiety these types of mental dilemmas are protected by the regular practice of meditation in the modern life.

Need and importance of physical education in the modern society: Physical Education is the education through physical activities or big muscle activities. J.B.Nash says "Physical Education is that phase of the whole field of education that deals with big muscle activities and their related responses." J. F. William stated that "Physical Education should aim to provide skilled leadership and adequate facilities, which will afford an opportunity for the individual or group to act in situations which are physically whole some, mentally stimulating and satisfying, and socially sound." About objectives it is said there are four main objectives of physical education these are physical development objective, mental developmental objective, social development objective and motor development objective. However, Physical Education is of great value for the man not only for his present but also for his future. It has special significance and unique role and has made unlimited contribution in the modern age as it caters to the biological, sociological and psychological necessities of the man. Swami Vivekananda has stressed that "What India need today is not the Bhagwat Geeta but the football ground." Need of Physical Education is for releasing from sedentarianism, automation, computerization, protection from environmental pollution, cultural degradation, social disintegration, religious turmoil, social imbalances, various psychological, physiological strains and disorders etc. The importance of Physical Education in helping out the man from various self created problems arising out of modernization of the society cannot be undermined. The importance of the Physical Education in modern society can be summarized as for optimum development, physical growth and development, intellectual development, emotional development social adjustment, personal adjustment, character development, physical fitness, mental development, health instinctive expression, cultural development, leadership qualities, health and safety habits, democratic values, constructive use of leisure time, expression and creativity, citizenship qualities, economic value, mental relaxation, national integration, international understanding, health attitudes and better sportsmanship etc..

Need and importance of sports in the modern society: Playing sport helps much to be physically fit. It builds character, teaches strategic thinking, analytical thinking, leadership skills, goal setting and risk taking. It helps balance of mind, body and spirit to feel and function at our best. Keep away stress, strain, and anxiety. Participating in sports/ physical activities develop the 5 components of fitness. Playing sports help release pressure and tension in a healthy and controlled way. The games and sports directly or indirectly generate income from sports-related sales and services, boosting international trade. Sports provide fun, heighten sense of overall well being, improve sleep patterns and levels of anxiety, clear the mind, develops motor skills and mind body connection, keep away depression, reduces risk of many diseases. Sports, physical activities are for uniting force because these brings individuals and communities together, highlighting commonalties and bridging cultural and ethnic divides. Sports for Learning and understanding because it provide a forum to learn skills such as discipline, confidence, leadership, tolerance, cooperation and respect and how to manage essential steps in life such as victory or defeat. The practice of sport is a recognized instrument for promoting peace, as it disregards both geographical borders and social classes.

Conclusion: It is concluded that in the modern life of man there is a lot of stress, strain, anxiety, hazards, psycho-somatic and hypo-kinetic diseases these have been caused due to inactive lifestyle, lack of kinetic movements, machinery and tool dependant lifestyle for advancement of science and technology. However, Yogasanas give sufficient exercise to the internal organs of the body for which a person can maintain good health and longevity of life, yogasanas reduce fatigue and calm the nerves hence protect the hazards of strain, stress and anxiety of modern life. Pranayam the soul of yoga gives spiritual joy, spiritual light and mental peace. It cleans the skull, the respiratory system and nasal cavities. The constant practice of pranayam strengthen the nervous system, the mind becomes calm and capable of concentration. It rouses spiritual power. It eliminates the cough accumulated in the wind pipe, and cures the asthma, it tones up the heart and activates the respiratory system, and it purifies the blood. Through meditation, the other part of yoga mind is expanded and there is a depth of mind is possible. Hence stress, strain and anxiety these types of mental dilemmas protected by the regular practice of meditation in the modern life. On the other hand the ultimate aim and objectives of Physical Education and sports are utmost development of human resource, the complete development of human personality, development of strength, stamina and endurance, maintenance of speed, agility, body composition and knowledge. Development of physical, mental, social health and spiritual faith of participants, make people dynamic and kinetic. Physical education and sports are being for personal, peace, community, human resource, learning, understanding, cultural, uniting force development. These are for sustaining health, wellness of human being in the modern life of 21st century.

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Effect of Physical Activity on Executive Functions in Children with Attention Deficit Hyperactivity Disorder (ADHD)

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Introduction

Attention Deficit/Hyperactivity Disorder (ADHD) is a prevalent, highly impairing, neurodevelopmental disorder defined by developmentally inappropriate symptoms of inattention, impulsiveness and hyperactivity. ADHD typically emerges early in childhood and commonly persists through adolescence and into adulthood, with outcomes characterized by high rates of unstable relationships, academic/occupational failure, criminality and substance use. The inattention and hyperactivity-impulsivity that characterize children with attention-deficit hyperactivity disorder (ADHD) are associated with organisational problems, risk for achievement difficulties, and extensive negative criticism from parents and teachers (Landau, Milich, & Diener, 1998). These children experience negative outcomes in personal, educational, and social domains that might impair their functional adaptation throughout their life (Barkley, Fischer, Smallish, & Fletcher, 2006).

Executive function is a set of skills that helps connect past experience with present action such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space to perform activities. Due to a break down in executive function Children with ADHD have trouble listening to or following instructions, begin tasks and then easily distracted or struggle to wait their turn. Sometimes blurt things out when they know better. Chris Dendy(2002) states that executive function deficits in children with ADHD can create problems in several areas. Children with ADHD consistently perform worse on executive function task relative to those without ADHD.

Physical activity is any body movement that works your muscles and requires more energy than resting. Walking, running, dancing, swimming, yoga, and gardening are a few examples of physical activity. Some researchers argue that voluntary physical activity can positively alter brain plasticity by neurogenerative, neuroadaptive, and neuroprotective processes (Dishman et al., 2006). Other researchers also add that the potential changes in cognition may be linked to psychological mechanisms such as self-esteem or attitudes following a physical activity program (Etnier et al., 1997). The effect of physical activity on specific

domains of child development such as cognitive function has received little attention to date (Hillman et al., 2008).

Claudia Verre et al (2012) concluded that a structured physical activity program may have clinical relevance in the functional adaptation of children with ADHD. Jennifer Gapin, Jennifer L Etnier(2010) suggested that Physical activity has a small effect on cognition in children and may be particularly beneficial for children with ADHD by impacting fundamental EF deficiencies that characterize this disorder. Olga G.Berwid, Jeffrey M.Halperin (2012) examined a direct impact of exercise on neural functioning and preliminary evidence that exercise may have positive effects on children with ADHD

Conclusion

Physical activity has been linked to improved cognitive functioning, superior overall health, and enhanced emotional well-being in populations ranging from school-age children to older adults. Physical activity may prove to be a viable alternative or supplement to other more invasive therapies. Hence, Physical activity program may be beneficial for children with ADHD. In addition to strength and motor skills, it positively influences behaviors and cognitive functions such as attention in children with ADHD.

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The Socio-Economic Status and Its Influence on Attitude toward Participation in Physical Education and Sports of Non-residential High School Students

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ABSTRACT

Swamy Vivekananda a great Indian saint states that "better to construct a stadium instead of constructing ten hospitals". Plato a great Greek philosopher states that "Lack of physical activity destroy the good conditions of every human being, while movement and methodical physical exercise save it and preserve it". Hence providing play field along with methodical/scientific physical education and sports programme in the society will be the key to develop strong participation motive in physical education and sports for develop physical fitness and exercise adherence among young brood. This study sought to examine the socio-economic status and its influence on attitude toward participation in physical education and sports of non-residential high school students. The study was carried out in non-residential high schools governed by government of Karnataka State, India. Hundred and twenty (120) high school students were the respondents. Two self-developed questionnaire "Participation in Physical Education and Sports Attitude Scale (PPESAS)" and "Socio-economic Status Scale (SES)" were served as instruments in gathering the data. The study revealed that the students of high socio-economic status had a higher attitude toward participation in physical education and sports than the students of low socio-economic status and the student of average socio-economic status. The study also indicated that students who are from high and average socio-economic status are most significantly influenced.

Key words: Socio-economic Status, Attitude, Physical Education and Sports

Introduction

Running, jumping, throwing, claiming, playing is the natural instinct of every living being. The word 'Nature' is having two distinct dictionary meaning, one is character and other is all the living, nonliving thing exists in the world. It clearly says human beings are the part of nature. Existence of physical movement within and outside the body is very basic for every living being and it is the nature. In the name of modernization peoples are living in very fast push button technology life style. They ride instead of walk, sit instead of standing and watch instead of participation and this is against the nature. As a result society has at a higher risk of hypo-kinetic disease. It

directly affect on the peoples rate of lifespan around the globe. Swami Vivekananda a great Indian educationist states that "if wealth is lost nothing is lost, if health is lost something lost, if characteristic is lost everything is lost". Hence there is an urgent need to develop strong participation motive in physical education and sports to develop exercise adherence and healthy lifestyle among young brood.

Statement of the study

The purpose of the study was framed to find out the socio-economic status and its influence on attitude toward participation in physical education and sports of non-residential high school students

Hypothesis

It was hypothesized that there is no significance influence of socio-economic status on attitude toward participation in physical education and sports of non-residential high school students.

Delimitation of the study

Study was delimited to 120 students consists of 60 boys and girls each of non residential schools governed and run by the government of Karnataka state. It is also delimited to Socio Economic Status and attitude towards participation in physical education and sports of non-residential high school students.

Limitation of the study

Extraneous factors other than socio economic status which are influencing on attitude of high school students towards participation in physical education and sports were not considered. Socio economic status was measured through parental occupation, education, income, poverty level and category of the students. Questionnaire was constructed by the research scholar himself and was limited to his knowledge. The responses obtained from the subjects are treated as correct and genuine.

Significance of the study

The result of the study will help to know the socio-economic status and its effect on attitude of high school students toward physical education and sports. The study will also help the school administration to plan, revise and formulate appropriate physical education and sports curricular activity in the school for catering the demands and interests of the students of different socio-economic status. To the physical education teacher study will helps while dealing and handling student with different socio-economic background and on the basis of this study he may inculcate what are the things to do to improve the physical education and sports performance of the students who are in the lower class family.

Methodology

The present investigation pertaining to "the Socio-economic status and its influence on attitude toward participation in physical education and sports of non-residential high school students" is in the framework of ex-post-facto research. The total sample consists of hundred and twenty (60 boys and 60 girls) high school students are from non-residential high schools run by government of Karnataka belonging to high, middle and low socio economics status.

Sample Design				
Gender	High SES	Middle SES	Low SES	Total
Boys	20	20	20	60
Girls	20	20	20	60

The socio-economic status of the high school students is considered as independent variable and attitude toward participation in physical education and sports of high school students is considered as dependent variable. For the study purpose two instruments in the form of questionnaire are developed to assess the socioeconomic status and attitude of toward participation in physical education and sports of high school students'. All items were written in English.

1. Participation in Physical Education and Sports Attitude Scale (PPESAS) was developed. Which consists of 5-point likert-type forty (40) questions covering benefits of participation in physical education and sports on five different aspects such as academic, psychological, general, social and health. To improve accuracy of despondence equal number of positive and negative questions covered in each aspect. The possible minimum and maximum scores of this scale is 40 and 200 respectively. A high score on this scale means a positive attitude toward participation in physical education and sports and vise versa.
2. Socioeconomic Status Scale (SES) was developed. This scale consists of 3-point likert-type five (5) questions related to parental occupation, education, income, poverty level and category. The possible minimum and maximum scores of this scale is 5 and 15 respectively. High score on this scale means a high socioeconomic status and vise versa. Students are categorized into three groups as high, middle and low SES on the basis of scores achieved 11-15, 06-10 and 01-05 respectively.

To meet the objectives of the present study the data was collected by administering PPESS and SES questionnaire to the students of high schools governed by Karnataka State. Follow up procedure will be adopted to obtain maximum response from the subject.

Statistical analysis

To achieve meaningful conclusions one-way analysis of variance (ANOVA) was computed. If the 'F' ratio was significant Scheffe's test was applied as a post hoc test to determine significant difference if any, among three paired means. The level of significance of test 'f' ratio obtained by analysis of variance was fixed at 0.05 level of confidence.

Table 1: One-way analysis of variance (anova) of data on the socioeconomic status and it's influence on attitude toward participation in physical education and sports of high school students.

Source of Variance	Sum of Squares	df	Mean Square	F-ratio
Between group	48268	2	24133.8	52.84*
Within group	53432	117	456.7	

***significant at .05; Critical F-ratio with 2,117 df > 3.07**

The presentation of result in Table 1 shows that there is a significant influence of socio-economic status on attitude of high school students toward participation in physical education and sports ($F=52.84$; $P>.05$). The null hypothesis was rejected because the calculated F-value 52.84 is more than the critical table value is 3.07 at .05 alpha levels with 2 and 117 degrees of freedom.

Table 2: Scheffe's post hoc test for the differences among three paired means of high, middle and low ses high school students on attitude toward participation in physical education and sports.

Adjusted Post test Mean			Mean Difference	Confidence Interval
Low SES	Middle SES	High SES		
81.93	106.78		24.85	24.1
81.93		131.1	49.12	
	106.78	131.1	24.27	

***significant at.0.05**

Table 2 shows that the adjusted post test means difference on low SES, Middle SES and High SES high school students. The mean difference is greater than the

confidence interval, value 24.1 which shows significant differences at .05 level of confidence. It indicate that there is a significant difference in attitude of high school students toward participation in physical education and sports between the adjusted post test means of Low SES, Middle SES and High SES groups.

Result and findings of the study

The socioeconomic status is significantly influences the attitude toward participation in physical education and sports of non-residential high school students. The students of high socio-economic status had a higher attitude toward participation in physical education and sports than the students of low socio-economic status and the student of average socio-economic status. Students of high and average socio-economic status have higher attitude toward participation in physical education and sports than the students of low socio-economic status.

Conclusion

Plato a great Greek philosopher states that " Lack of physical activity destroy the good conditions of every human being, while movement and methodical physical exercise save it and preserve it". Massive young population is a great resource of the huge country of India. Present young people will be the future member of the work force who will need to use knowledge to maintain a healthy life style. So developing positive attitude of participation in physical education and sports is very essential among these young people who studied in school and colleges.

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Importance of Pranyam & its Benefits

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Pranayama has the capacity of freeing the mind from untruthfulness, ignorance and all other painful and unpleasant experiences of the body and mind; and when the mind becomes clean it becomes easy for the Sadhaka to concentrate on the desired object and it becomes possible for him to progress further in the direction of Dhyana and Samadhi.

By Yog asanas, we remove the distortions and disabilities of the physical body and bring it into discipline, However Pranayama influences the subtle and the physical bodies in a greater measure than Yogsanas do and that too in a perceptible manner. In the human body, lungs, heart and brain hold very important positions and they depend on each other heavily for their health.

Physically, Pranayam appears to be a systematic exercise of respiration, which makes the lungs stronger, improves blood circulation, makes the man healthier and bestows upon him the boon of a long life, Physiology teaches us that the air (Prana) we breathe in fills our lungs, spreads in the entire body, providing it with essential form the body, take them to the heart and then to the lungs, which throws the useless material like carbon dioxide out of the body through the act of exhalation. If this action of the respiratory system is done regularly and efficiently, lungs become stronger and blood becomes pure,

However, most of the people do not have the habit of breathing deeply with the result that only one-fourth part of the lungs is brought into action and 75 percent remains idle. Like the honeycomb, lungs are made of about 73 million cells, comparable to a sponge in their making, On normal breathing, to which we are accustomed, only about 20 million pores in the lungs get oxygen, whereas remaining 53 million pores remain deprived of the benefit, with the result that they get contaminated by several diseases like tuberculosis, respiratory diseases and several ailments like coughing, bronchitis etc,

In this way, the inefficient functioning of the lungs affects the process of blood purification. Heart weakens because of this with a constant possibility of untimely death. It is for this reason that the importance of Pranayama has come to be recognised, for a healthy long life. Several diseases can be averted by regular practice of Pranayama, Hence, it is obvious that the knowledge of the science of Pranayama and its regular practice enables a man to lead a healthy and long life, It

is for this reason that in several Hindu religious rites, Pranayama is found to have been introduced as an essential element.

Mental disturbances like excitement, anxiety, fear, anger, disappointment, lust for sex (lasciviousness) and other mental perversions can be calmed down by regular practice of Pranayama. Besides, Pranayama practice improves the functions of the brain cells with the result that memory and the faculty of discrimination and observation improves, making it easy for the Sadhaka to perform concentration and meditation.

Another benefit of Pranayama is that by its regular practice, habit of deep breathing is developed which results in several health benefits. It is said that the nature determines our life span on the basis of the number of respirations we do, Man gets the next birth in accordance with his karmas (deeds) done in the present life.

Our karmas (deeds) result in the formation of certain tendencies, which determine the nature of our next birth either as humans or as animals of various categories, A man, who regularly performs Pranayama, is required to take lesser number of breaths and therefore lives longer.

Some rules for Pranayam

- ❖ Select a clean and peaceful place for doing Pranayama, If possible, choose a place near a clean pond or river.
- ❖ As there is a lot of pollution in the cities, some kind of incense can be lit like Guggulu and purified butter, to create a clean environment at that place, igniting a lamp with purified butter only, can also serve the purpose.
- ❖ Sit either in any of the Asanas, viz, Padmasana, Sidhasana or Vajrasana, which ever you find convenient. The sheet or cloth (cotton or wool etc.) on which you sit must be a non-conductor of electricity.
- ❖ Breathe only through the nose, because by doing so the air which you take in, is filtered. During daytime when you are not sitting for the performance of Pranayama make it a habit to do respire only through nose and not through mouth. Nasal respiration keeps the temperature of the Nadis (Vessels) -'Ida', Pingala and 'susmana' even. It also prevents foreign and harmful objects from getting into lungs.
- ❖ Like 'Yog', Pranayama should also be performed four or five hours after taking food. In the morning Pranayama should be done after finishing daily routine acts like cleansing mouth, emptying of bowels etc., it should also be done before Yogsana. In the beginning Pranayama should be done for five or ten minutes gradually the time may be increased up to about 1/2 or 1 hour, Maintain a specific number of repetitions and do not variate, Maintain a specific rhythm. If it is not possible to clean the bowels by morning, at night

take some mild laxative like terminalia chebula (Indian Hardaya) or any other mild laxative (a non habit forming medicinal herb having a laxative effect), Kapala-bhati Pranayama, if done regularly for a few days will help in curing constipation.

- ❖ Keep your mind calm and composed. However, Pranayama can also calm down the disturbed mind and keep one happy. Methods of Pranayama may be varied according to the seasons and your own physical make up and mental attitude. Keep this in mind and modulate the method accordingly. Some Pranayama increase the body temperature, whereas, some bring it down. Some Pranayama maintain the temperature at the normal level.
- ❖ If you feel fatigued in the course of doing Pranayama, rest for sometime and then begin deep breathing, which will remove the fatigue.
- ❖ Pregnant women, hungry persons, persons suffering from fever and those are lustful having no control on their passions should not do Pranayama. If you are sick, keep in mind the instructions to be followed by sick persons while during Pranayama.
- ❖ For prolonged exercises of Pranayama, observance of celibacy is necessary. Besides, food should be simple not containing irritating spices. It should be 'Sattvika' - (Plain and simple, non-spicy food), Use of cow's milk, ghee (clarified butter), fruits and green vegetables can be said to be ideal food. Moderation also is a good rule to observe.
- ❖ Do not strain yourself while doing 'Kumbhak' i.e. retaining the breathed air inside or keeping the air out after exhaling (Breathing in is called 'Puraka', retaining the breathed air in is called 'Kumbhak' and exhaling the air is called 'Recak').
- ❖ Pranayama does not mean just breathing in, keeping the breathed air in and exhaling it, It also means establishing control on the entire breathing process, and maintaining mental equilibrium, and concentration of mind.
- ❖ It is beneficial to chant the mantra (a group of words that carry vibrations and energy) Om (the first cosmic soundless sound), aloud and repeat the same several times before doing Pranayama. Even recital of sacred songs in the praise of almighty God or recital of some sacred hymns may be beneficial. This will calm your mind and make you fit for Pranayama, because a peaceful mind is very essential while doing Pranayama. Mental or loud recitation of Gayatri Mantra (considered as one of the greatest mantra, used in meditation and also for chanting) or any other sacred hymn brings spiritual benefits to the Sadhaka.
See that while doing Pranayama, none of your organs such as mouth, eyes, nose, etc. feels any strain and it should be done gradually without any undue stress or strain. All the organs of the body should be kept in normal

condition, While doing Pranayama sit in an erect posture. Keep your spine and neck straight. This is essential for reaping the full benefit of Pranayama.

- ❖ If possible Pranayama should be done after your usual morning functions like cleansing of mouth, evacuation of bowels, bathing etc. However, if it becomes necessary for you to take bath after Pranayama, keep an interval of about 15 to 20 minutes between Pranayama and bathing. For acquiring proficiency in Pranayama do not depend on books or what is done and preached by others. Seek the guidance of an expert and do Pranayama under his direct supervision.

Different treatise advocating or dealing with the subject of Pranayama describe several methods and each of them has its own importance. However, it is not possible for most people to do all these exercises daily. Hence, with the blessings of our teachers and in view of our experience, we have evolved seven methods of Pranayama, which incorporate into themselves, almost all the peculiarities of Pranayama rendering them scientific and useful from a spiritual point of view. All these seven types of Pranayama can be done, as a routine and in a time bound programme of about 20 minutes, The person who does these exercises daily and regularly can attain following benefits which are briefly described as under:

- ❖ All the three Doshas (Humors) - Vata, pitta and Kapha get adjusted in proper proportion and abnormalities in them are removed,
- ❖ Digestive system improves and diseases pertaining to digestive organs are cured.
- ❖ Diseases pertaining to lungs, heart and brain are also cured.
- ❖ Obesity, Diabetes, Cholesterol, Constipation, Flatulence, Acidity, Respiratory troubles, Allergy, Migraine, High blood pressure, diseases pertaining to kidneys, sexual disorders of males and females etc. are also cured.
- ❖ Resistance against diseases is stepped up. Immunity develops.
- ❖ Hereditary diseases like diabetes and heart disease are can be avoided.
- ❖ Falling of hair or its premature graying, appearance of wrinkles on face or other-parts of the body at young age, diminution of eye sight, forgetfulness, etc. are relieved and process of aging is retarded.
- ❖ Face becomes bright, luminous and calm.
- ❖ Energy Chakra are cleansed and enables the practitioner to awaken the Kundalini.
- ❖ Mind becomes stable and tranquil. A sense of contentment and enthusiasm or zeal develops. Conditions like depression are relieved.
- ❖ Performance of yogic exercises like meditation will be easy.

- ❖ All the diseases of the physical and etheric bodies will be cured. Freedom from negative and harmful mental conditions like anger, iasciviousness, greed for money, arrogance etc. will be achieved.
- ❖ All the physical and mental disorders and abnormalities are cured and toxins eradicated from the body.
- ❖ Freedom from negative thinking is achieved and the mind develops the habit of positive and constructive thinking.

Analysis of Pre-Competition Mood States of Team Sports Players of Andhra University

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ABSTRACT

The aim of this study is to assess pre-competition mood states of team sports players of Andhra University. One hundred and twenty (120) team games players were selected as subjects, who represented Andhra university team in Indian Inter University Competition. The age of the subjects were ranged between 20 and 28 years. In the present study mood state was selected as criterion variable. To measure Profile of Mood States Questionnaire developed by McNair et al, (1971) was used in the present study. In the present study stratified group design was employed. The data on selected criterion variables were collected from the subjects confined to this study, by administering the questionnaires 15 days, 7 days and 1 day prior to the match they completed the POMS on three separate occasions before their inter university competition. The repeated measure ANOVA was calculated for mood states. Whenever, the F ratio is found significant, post hoc tests using the Bonferroni correction was applied to know the difference between the tests. The result of the study showed that tension, depression, anger, fatigue and confusion showed no changes at different testing conditions (Table 1). However, positive factor vigour showed significant improvement as competition advances. It is concluded that vigour of team players to tend to improve but other negative factors showed no changes.

Keywords: POMS, team games, players, questionnaire

Introduction

Sport is generally considered a primarily physical endeavor, involving the marshaling of bodily resources to complete a variety of specialized, demanding physical tasks. Undeniably, physical attributes such as speed, strength, endurance, power, coordination, agility, flexibility, and resilience are richly rewarded in competitive sport. Recognizing the abundant physical component of sport performance, scientists have investigated biomechanical, physiological, nutritional, metabolic, epidemiological, biochemical, pharmacological, and medical aspects of sport. Applied practitioners in exercise physiology, physiotherapy, sport biomechanics, sports medicine, sports nutrition, strength and conditioning, and other disciplines have translated research findings into interventions designed to enhance the physical performance capabilities of the athletes.

The ability to produce and maintain appropriate emotional feelings before competition is universally recognized by athletes and coaches as one of the most important factors contributing to athletic performance. Thus, it is not surprising that the relationship between precompetitive emotions and sport performance has generated considerable interest from researchers in the field of sport psychology (Jones & Hardy 1990; Ken 1989; Landers 1991; Martens, Vealey, & Burton 1990; Neiss 1988; Silva & Hardy 1984). One popular line of research has focused on discriminating between successful and less successful performers based on their mood states prior to competition. The conceptual (descriptive) approach primarily used in this line of research has been Morgan's (1980) Mental Health Model. It is proposed through this model that positive mental (i.e., emotional) health and successful athletic performance are highly correlated. Specifically, athletes who are less anxious, angry, depressed, confused and fatigued, and more vigorous will be more successful than those athletes who exhibit the opposite profile, as assessed by the Profile of Mood States (POMS; McNair, Lorn & Droppleman, 1971). This positive profile of mood states has been termed the iceberg profile by Morgan since the five negative moods fall below the population norm and the one positive mood lies above it. The aim of this study is to assess pre-competition mood states of team sports players of Andhra University. Methods Subjects & Variable

In this study 120 team games players were selected as subjects, who represented Andhra university team in Indian Inter University Competition. The age of the subjects were ranged between 20 and 28 years. In the present study mood state was selected as criterion variable. In the present study stratified group design was employed. Selection of Instruments

Profile of Mood States Questionnaire developed by McNair et al, (1971) was used in the present study. This questionnaire constitutes 65-items which measures five negative scales such as fatigue, depression, tension, anger, confusion and positive scale vigour. Collection of Data

The data on selected criterion variables were collected from the subjects confined to this study, by administering the questionnaires 15 days, 7 days and 1 day prior to the match they completed the POMS on three separate occasions before their inter university competition. Then, the duly filled-in questionnaires were collected from the subjects and subjected to evaluation according to the scoring key. The total scores obtained were tabulated and statistically treated, to arrive at meaningful conclusions. Statistical Techniques

The repeated measure ANOVA was calculated for mood states. Whenever, the F ratio is found significant, post hoc tests using the Bonferroni correction was applied to know the difference between the tests. Results were reported as the mean \pm SD of all observations, and the level of significance was set at $p < 0.05$.

Results

The result of the study showed that tension, depression, anger, fatigue and confusion showed no changes at different testing conditions (Table 1). However, positive factor vigour showed significant improvement as competition advances. The obtained F ratio 12.63 is greater than the required table value of 3.0337 at $D = 0.05$ for the df of 2 and 238.

Variables	Testing conditions	Mean±SD	F
Tension	15 Days	7.04±3.15	0.009
	07 Days	7.08±3.08	
	01 Day	7.06±2.96	
Depression	15 Days	4.78±2.99	0.306
	07 Days	4.61±2.89	
	01 Day	4.58±2.88	
Anger	15 Days	6.91±3.24	0.021
	07 Days	6.95±3.35	
	01 Day	6.88±3.76	
Vigour	15 Days	17.22±3.61	12.63*
	07 Days	17.87±3.48	
	01 Day	18.86±3.52	
Fatigue	15 Days	6.99±3.49	0.783
	07 Days	6.93±3.79	
	01 Day	6.60±3.91	
Confusion	15 Days	4.98±3.06	0.013
	07 Days	4.95±3.02	
	01 Day	4.94±2.91	

Post hoc tests using the Bonferroni correction revealed that vigour improved in team players of Andhra University from 15 days to 1 day prior to competition which was statistically significant ($p < 0.05$). However, it also showed statistically significantly different improved from 7 days to 1 day prior to competition ($p < 0.05$). Therefore, we can conclude that vigour improved as the competition day advances and no changes were recorded on tension, depression, anger, fatigue and confusion.

Discussion

Conversely, in team sports, the pressure of training and stress distribute to the whole team and team members support the weakness of each other. Notwithstanding those five negative mood states, "Vigour" has been known as a kind of positive mood status for athletes. One day before competition, the level of

vigour is higher among team sports players. The team sport, as they are getting closer to the competition, the vigour mood state became stronger from one week to one before competition which was due to the fact of increasing self-confidence among team members. James & Lane (2002) and Lane & Chappell (2001) concerning the effects of moods on team sports showed that behavior trait of team such as volleyball, football and basketball showed improvement in positive factor vigour.

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The Effect of Yogic Practies on Selected Physical Fitness Variables of Collegiate Mens

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Introduction

Yoga is a science that consists of ancient theories, observations and principles about the body and mind. It's the form of physical activity that provides complete exercise to the entire body and massages all the internal organs and glands. Yoga is a medication without the actual use of medicine. No visible side effects are associated with the practice of yoga on regular basis. This is one of the foremost reasons people to start practicing yoga to feel more energetic, happy and peaceful. ,

Importance of yoga

Yoga is useful for all types of sports to help prevent injuries. One gets extra agility, which helps to avoid damage, provides more strength, and improves a player's ability to react to a situation. Due to long-term sports training, muscular imbalance can develop in the body, which can lead to damage and injury.

Yoga is a perfect way to incorporate balancing exercises into the training routine Balance exercises are often overlooked by athletes, but are one of the most effective ways to correct muscle imbalance or body mechanic problems Yoga helps a sports person to feel, and understand, the body processes more accurately; thereby learning what the body needs. By understanding this, an athlete can work on areas that need attention, with confidence.

Objectives of the study

To find out the effect of yogic practices and asana on static and dynamic balance and speed collegiate sports men.

Methodology

The study was an experimental one. To achieve the purpose thirty intercollegiate players from Osmania University were selected for pilot study. Samples were selected randomly. Since finding the result was an exhaustive process it was planned to continue for a six week period and included three sessions per week of 60-90 minutes duration. The selected subjects were divided into two equal groups namely Experimental group, (group A) control group (Group B). The

experimental group underwent 6 weeks of training. The control group maintained their daily routine activities and no special training was given. Eleven asana were performed by yogic practice group namely, Trikonasana, Vrikshasana, Bujangasana, Vajrasana, Chakrasana, Halasana, Dhanurasana, Sarvangasana, Shavasana, Mastyasana, Hastapadangustasana. The subjects of the two groups were tested using standardized tests and procedures on the selected physical variables before and after the training period to find out the training effects using the following test items, 60 meters. To measure speed, and to measure balance Stork stand test were used. The yogic practice group shown improvement on speed and balance than the controlled group.

The pretest and posttest performance of the subjects in the selected variables was subjected to; appropriate statistical analysis to find out the significance of the practice of yogic asana at 0.5 level of significance.

Table 1: Test for Balance - Stork test

Group	Mean		Std. Deviation	Std. Error Mean	df	T ratio
	Pre test	Post test				
Experimental Group	Pre test	19.20	3.59	0.84	14	4.006
	Post test	22.19	3.69	0.83		
Control Group	Pre test	19.60	3.50	0.74	14	1.819
	Post test	19.97	3.14	0.71		

Table 2: Test for Speed - 60 mts. Sprint test

Group	Mean		Std. Deviation	Std. Error Mean	df	T ratio
	Pre test	Post test				
Experimental Group	Pre test	9.57	.95	.25	14	6.317
	Post test	9.29	.95	.25		
Control Group	Pre test	9.37	1.06	.28	14	1.229
	Post test	9.45	1.02	.27		

ment from the players, their level of
of the intervention In the light of study
arrived at -It was concluded speed and
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with selected asana it helps physical
Yogic Asana and programmed to improve
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Physical Fitness : A Review

Prof. NB Shukla, Tushar Dhar Shukla,
Sudha Shukla and Dr. Shirnath Tripathi

Introduction

The word 'fitness' has been interpreted to mean different thing to different people. The term implies a relation between the task to be performed and the individuals capacity to perform it (Morehouse and Miller, 1976). Physical fitness is the ability to carry out daily task vigorously and alertly without undue fatigue and with ample energy to enjoy letsuxe time pursuit to meet imforeseen emergencles (Clarke, 1976).

Physical fitness is one aspect of total fitness. The term has been defined in different ways. The definition set forth by Gallagher and Brouha (1944) provided an excellent description. They point out that physical fitness is composed of :

1. Static or medical fitness, which refers to soundness of the organs of the body such as heart and lungs.
2. Dynamic or functional fitness, or the degree to which the body functions efficiently under strength.
3. Motor skill fitness, which refers to coordination and strength in the performance of activities.

Although these definition each emphasize different aspect of fitness. There is no fundamental disagreement among them. Fitness as an overall concept appears to have many component including intellectual and emotional, as well as physical factor. These differ ion relative importance from one portion of life to another, depending on varying individual roles and responsibilities (Davis et al, 1961; Karpovich, 1965; Astrand & Rodahl, 19979 and Devries, 1966). Physical fitness has always been one of the foremost goals of physical educationist and sports scientist. The measurement and method of developing fitness have been the topics of nation concern through the years. It is virtually impossible to obtain complete consensus of opinion with regard to test it. Probably the most generally accepted battery of simple test used in a national survey endorsed by 'American Association for Health Physical Education and Reoreation (AAHPER). The test administered to more than twenty five million American childrens. Original items conducted in two days were :

First day - Pullps, (Boys) Flexed armhand (Girls) Situps, Shuttle Run, Standing broad Jump,

Second day - Fifty yard dash, soft ball throw and six hundred yard run and walk.

Since the original norms was published in 1958, additions national surveys have been conducted with norms (AAHPERD, 1976). Flaxed leg situps has been substituted for straight leg situps. Softball throw has been eliminated and six hundred yard run has been modified to two optional runs. i.e. nine minute and twelve minute run.

The term 'motor fitness' while often used synonymously with physical fitness, was coined to include to element which involve more abilities than those basic physical fitness component yet was not to encompass the various neuro-muscular co-ordination skill which make up general motor ability. The immediate capacity of an individual to perform in many varied stunt or athletic events is referred to as general motor ability (Mathew, 1978).

There are somany factors that contribute to successful performance in athletic skills. In a preliminary study related to learning of motor skill, McCloy (1940) lists some important factors as muscular strength, dynamic energy, ability to change the direction, flexibility, agility, peripheral vision, concentration, understanding of the mechanics of the techniques of the activities, absence of disturbing of inhibiting emotional complications, timing, rhythm and co-ordination.

Now it is established fact that physical fitness has been defined in board terms, and tests have measured either an aspect of physiological function or selected aspect of motor performance. This type of test has been termed motor fitness and includes not only strength and endurance components, but also factors of speed, power and agility (Clarke, 1971). Motor fitness test are more indicative of potential for athletic excellence than fitness for health promotion. As the concept of physical fitness has moved away from athletic participation towards health the components have changed to included cardio-respiratory function, body compostion, strength, endurance and low-back flexibility, traits shown by medical and excersise soientists to promote health and reduce the risk of disease (Baumgartner and Jaokson, 1991).

Statement of problem:

After a through investigation of allied literature it was found necessary to conduct a study on male university volleyball players because university age is a peak performance age (Rodhal 1989) and in india after Joining the university many spatimen seems diassociated from the field of sports and games.

Purpose of problem:

Present study is for the benefit of professional worker in the field of physical education and sports since in training and measuring of university volleyball players.

Purpose of the study is to compare the physical fitness standard of volleyball players in the each malurity. Anthropometric type variable, which is essential for volleyball players.

Study also provide a wide effect or variables over physical performance of volleyball players.

Limitations

Present study in limited to only male volleyball players who are participating regularly in various universities as volleyball players.

Selection of the sample are limited to the age group of seventeen to twenty five years. They should not be less than seventeen and more than twenty five years of age.

Hypothesis

There is no difference on physical fitness variables, volleyball players.

Review of Literature

The literature is any field form foundation upon which all future work should be built and improved. Thus, a study of related literature may serve to avoid unnecessary works on problems and may help to make programme towards the solution successful completion and handling of new project in a better way. It is popularly believed that for worthwhile investigation a review of literature is of great help to the investigator in any problem. It is also true that study of related literature avoid the risk of duplication provide theories, ideas, explanation or hypothesis, valuable information about the problem and contribute towards the general point of investigation.

The process of evaluating physical fitness firstly, essential from the point of examining one's motor development in relation to age and secondly to understand the training strategies to be adopted in relation to his development status (Greenlee, 1986; Sobral et al, 1986; Szozeny, 1986). The physical fitness one of course be divided into general and specific physical fitness (Sodhi & Sidhu, 1984). The criteria for developing yard-stick in this regard and yet to develop it in India as well as in many other part of the world. Although the influence of one's physique, body composition and physical growth seem to play a greater role in its determination (Marke et al, 1961; Ririk 1967; Clarke, 1971' Arstila et al, 1975; O-Bar-Or, 1975; Pandolr, 1975; Pederson & Welch, 1975).

The physical fitness cherecteristics of athletes participating in different sports have been shown in numerous studies (Spurgeon, et al, 1980; Baunen et al, 1981; Komi, 1981; Eston & Maridoki 1906; Stiring et al, 1986).

Statistical Analysis

These variable in being representative of major diversion of subject will be used for comparative analysis when two group are compared "t" test for computed.

For testing hypothesis the level of confidence will be set at 0.05, 0.01 levels.

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Need of Yoga and Physical Education for Stress Free Life among Students

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ABSTRACT

Yoga and physical education is an important concern for all human beings since it contributes to their happy and pleasant life. Yogic exercises are extremely helpful in increasing self-confidence as well as helpful in physical fitness. In the present paper a brief discussion about need and importance of yoga and physical education and its historical background. An attempt is made how to develop stress free life among students. In this connection a detail discussion about blue print of yoga and physical education is also done. This paper will give an understanding of teacher, school administrator, students and parent towards importance of Yoga and Physical education in school curriculum and also develop the positive attitude of people towards it.

Yoga and physical education both contribute not merely the physical development of the child but also have a positive impact on psycho-social and mental development as well. Playing group games have a positive impact on individual self-esteem, promotes better interaction among children, imparts values of co-operation, sharing and to deal with both victory and defeat. Yogasana is based on sound knowledge of human anatomy and physiology. Placing the body in certain posture or position stimulates specific nerves, organs and glands. Many yogasanas offer an opportunity for the physical expression of mental imagery, with which children are usually very comfortable. Sitting yogasanas provide greater blood circulation in parts above the waist. Thus, the vital organs are energized, giving increased stimulus to brain functioning. Similarly, inverted yogasanas help in increasing blood flow to the brain and activate the brain cell. Yogic exercises are extremely helpful in increasing self-confidence as well as helpful in physical fitness like chest expansion, height and grip strength and the decrease of bulk in the body. But Yoga and physical education have not been given the due importance in the school curriculum and neither has their contribution to the health and overall development of the child been adequately acknowledged. The constraints face by yoga and physical education is related to a number of factors that affect the quality of school education in general and health and physical education in particular (NCF 2005).

Empirical studies were shown that yoga practices contribute to flexibility and muscular fitness, correct postural defects among school children and also play an important role in improving cardio-vascular efficiency and help to control and

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reduce excessive body fat. (Gannadeepam&Bera, 2003; Mishra, Tripathi&Bera 2003). Apart from contributing to physical fitness, yoga also contributes to improving learning, memory and dealing with stress and anxieties in children. (Bera&Gharote, 2002). The findings of Manjunath&Telles(2004) study indicate thatYogasanas&Yogabreathingincrease the delayed recall of spatial information. Yoga training also increase the grip strength, dexterity, confidence, self-efficiency, mental health, creativity, concentration, memory & intellectual abilities. Yogasana reduce neurotic tendency, general anxiety, and physiological anxiety & sleep disturbance. (Venkatesh, 2005).Crowley (2002) found that if brief yoga programme organize that reduce the immediate anxiety level. Yoga improves the quality of life and self-esteem (Deshpande, 2008).It seems that theseprogrammes are helpful to the students to deal effectively with the normal developmental task of adolescence and face life situations boldly. As observed by Cozens and Stempt, "Sports and physical activities belong to the 'arts' of humanity. Such activities have formed a basic part of all cultures, including all racial groups and historical ages, because they are as fundamental a form of human experience as music, poetry and painting. Every age has its artists, its adherents and its enemies. While wars, systems of government, plagues and famines, have come and gone in the long record of mankind, these fundamental things have always been present, in greater or lesser degree." (cited by Agarwal 2009).

Historical Development of Yoga and Physical Education

Health is an important concern for all human beings since it contributes to their happy and pleasant life. Health, nutrition and education are important three inputs need to be addressed in a comprehensive manner. Modern civilization, involving crowded localities, sedentary occupations, more mental work, restricted opportunities for natural physical growth—all these require involvement in some physical activities. They must be encouraged to devote special attention for maintaining the health of the body and mind. In ancient period Yoga and Physical education was in great concerns in 'Gurukulas' and considered as integral part of education.

The ancient Greeks had developed a well-organized physical education programme by 800 BC. Special training institutions called gymnasiums were set up where boys and girls were given physical and military training. It also includes jumping, running, wrestling, disc throws and javelin throws. During the 1800s, physical education programmes were introduced in schools in several countries like, Germany, the United Kingdom, Sweden, etc. These programmes included athletics, gymnastics and some sports. All possible efforts are made to provide maximum opportunities to children and adults to take part in a variety of physical education programmes. New Physical Education is aimed at sharing with other disciplines. Its contribution to the cognitive, conative and affective development has been

recognized. The major programmes included in physical education are: Calisthenics, Athletics, Games, Aquatics, Rhythmic Activities, Gymnastics, Yogic Exercises, and Judo. (Agrwal 2009)

Need and Importance of Yoga and Physical Education

Yoga and physical education play a vital role in the development of personality of a child. It is, therefore, very essential to understand the importance and need of physical education and yoga. Some important points are mentioned here to understand the need and importance of physical education in schools:

1. First and foremost important things are physical well-being of individuals. Physical education and yoga provides normal physical growth and development, in developing endurance and strength to do normal tasks of life as well as to meet the demands of the stress of life, without felling undue strain and in maintaining and developing proper and sound functioning of organs and organic systems.
2. Physical education and yoga develop motor qualities such as endurance, strength, speed, coordinative abilities, flexibility and power, etc. These qualities are essential for participating effectively in sports and games as well as for leading a healthy and productive life in society.
3. Neuro-muscular coordination is essential in order to accomplish a work gracefully. Such activities are developed only through physical exercises and that too at the younger age to a considerable extent. Physical activities are also helping in Maintenance of health and fitness a large measure to slow down the degenerative process.
4. Physical education provides opportunity to acquire knowledge of first-aid and proper health procedure related to physical exercises.
5. Gregarious instinct in the adolescent is very predominant or expresses the desire of the growing boys to form groups. If no opportunity is provided to the students, they may form gangs activities enable them to work in appropriate groups.
6. By participating in a variety of physical activities, students learn valuable lessons of cooperative and team work.
7. Recreational interests developed through physical activities prove to be very beneficial in the leisure hours of adult life and make life fuller and richer. Physical education important due to fact that it developing the sense of loyalty among the students. Tournaments foster this sentiment. Physical education and yoga develop skills which prepare students for a vocation.

Attitude of teachers and students towards Yoga and Physical Education

As far as the curriculum and syllabus is concerned, the aims and objectives of this area was not clearly stated and the existing syllabus for this area did not contain minimum levels of learning and the activities prescribed under yogic exercises were found to be inappropriate. The infrastructure for physical education was found appropriate but fifty percent of the lower primary schools of Mysore city did not have physical education teachers. A significant percentage of general teachers had a negative attitude towards physical education. (Sudarshan and Balakrishnaiah: 2003). The secondary status given to physical education is corroborated by a study on attitude of secondary school students towards physical education. This study showed that in government and private schools; across rural and urban areas and across gender there was a positive attitude towards physical education. This study also showed that students in government schools had better attitude towards physical education as compared to the private schools. Students in urban areas had a better attitude to physical education than those in rural areas. The study observed gender difference in the attitude towards physical education with boys having a more positive attitude than girls (Mishra 2003).

The experience of introducing yoga in school curriculum has been quite a mixed experience. There is a tendency for yoga to be reduced to mere physical exercise that defeats the very essence of this practice. At present, a shortage of trained yoga teachers is related to the non-availability of adequate number of institutions that have the capacity and expertise for this purpose. If yoga is to be effectively integrated then the government would need to overcome the shortage of yoga teachers beginning with the senior secondary level and then consider classes from sixth to tenth. In the interim period teachers who are trained in physical education are also getting some training in yoga education. It may be worthwhile to review the syllabus and pedagogy of the teacher's training programme offered by different colleges and deemed universities in this area. Apart from the concern about availability of trained teachers, there is also the negative attitude of administrators at the central, state and district levels within the education department and authorities within schools with respect to both yoga and physical education. The experience of both these areas has been that where there is a supportive school atmosphere the transaction of both these subjects has by and large been effective but examples of these are rather few in number.

Implementation of health Education and Yoga in Schools:

The physical education Programme should be an integral Programme of curriculum for all students. It is a definite and functional medium of education that aims to develop the pupil's physical, social, emotional and mental capacity to the optimum. The physical education should contribute to the development of individual; it should be a genuine harmonizing education in concept and practice,

helping each individual to add to inner satisfactions that are fundamental to real happiness. This phase -of the-curriculum should promote vigorous health, healthy mental and emotional behaviour and developmental patterns, safety skills, hygienic habits and social activity that have immediate and permanent value to each pupil. Physical-education experiences should provide students with instruction in activities and skills that have carry-over value to adult life. In an age in which leisure time is increasing, the yoga and physical-education programme has a responsibility for contributing to the full active life of each individual. Guided and directed learning experiences in this area contribute to the building of more productive and effective citizens. Objective of yoga and Physical Education at Primary Stage (Class I to V) are to be developed healthy habits to like keep their hands, feet's, eyes, nose and hair clean and also inculcate attitude to live in clean environment as well as create awareness and sensitivity toward environment and its importance for living beings. Through yoga and physical education we can also develop values like respect for physical work, dignity for labour, hard work, regularity, punctuality and ability to accept failure and through which a holistic wellbeing and qualities of enterprise, initiative, followership as well as leadership will be developed.

Keeping in the mind all of above objectives researcher is try to develop a Yoga and Physical Education programme for children and tries to cover the all domain i.e. cognitive, conative and affective of education. The Table no.1 which is showing the blue print of yoga and physical education programme includes objectives, content and activity of physical education and days and duration allotted in the time table at primary level.

Table 1: Blue print of Yoga and Physical Education.

Days and Duration:	Objectives	Contents	Activities
Twice in a week, 30 minutes	Knowledge and Practices	Importance of physical Fitness, importance of Yoga/P.T. for physical fitness, healthy attitudes towards competition (through lectures)	Yoga/P.T. (daily), dance, sports, singing games, fundamental rhythms animal rhythms, play and character rhythms group games, metric Aquatics and gymnastics (availability of coach/ experts /trainer/ resource person) celebration of sports week Organizing various Competitions

Objective of Yoga and Physical Education -

The educational objectives, to which physical education instruction should contribute, are physical fitness, social efficiency and culture. The major objectives of physical education includes -

1. To make the students to understand importance of physical fitness.
2. To make the students to understand the importance of Yoga and exercise for health.
3. Developing physical abilities and psychomotor controls by providing a wide, rich programme of activities that demand and increase neuromuscular skills.
4. Encouraging the development of good sportsmanship, thus building character and better citizenship.
5. Building organic fitness through activities selected to increase the pupil's strength, endurance, agility, flexibility, and capacity to meet the physical demands of today and tomorrow.
6. Generating among the students meaningful vitalized recreational habits and interests that will carry over into worthy adult hobbies and avocations.
7. Practicing good citizenship skills through the kind of physical competition that develops good sportsmanship.

Selection of Content- Above objectives can be achieved by following contents through teaching-

- (a) Importance of physical fitness
- (b) Importance of Yoga/PT for physical fitness
- (c) Nutrition and growth
- (d) Healthy attitude towards competition

Selection of activity

Fundamental rhythms, Animal's rhythms, Play and character rhythms, Dances, Group games, organizing various competitions

Strategy for Implementation- Objective of Yoga and physical education may be achieved through two ways -

1. Teaching about Physical health
2. Physical development.

1. Teaching about Physical health

One of the important dimensions for this is to bring awareness of physical fitness. Teacher can describe how rest and sleep needed to enable body to repair itself to remove fatigue or waste products and to enable the muscle to relax. They can also plan a balanced Programme of physical activity as well as describe the

relationship between nutrition and growth. They can also give knowledge about how growth and development is a sequential process but this unique process is determined by the structure of the various sensory apparatus. Teacher can also explain that it is easier and less expensive to prevent diseases than to cure them as prevention is always better than cure.. A series of expert lectures on different topics such as physical fitness, importance of yoga etc. may be organized by school authority for students. This concept may also be given to students through charts, models; films related to sportsman of different areas or to show the lifestyle of sportsman.

2. Physical Development-

Physical developments can be achieved through vigorous muscles activity. School should have provision of yoga/P.T. Yoga practically tranquilizes and relaxes the mind from psychological broodings and tensions. Yogic ways help in part in the development of a balanced personality and harmonious development of the mind, body and the soul. Hence, Yoga is a must to be introduced in the school. Keeping in view the requisite age group of the children, this will solve many health problems of the school. A number of activities can be developed to meet the objective of Yoga and physical education Programmes presented in table no 2

Table 2: Activities related to Physical development.

Dance and singing games	Fundamental rhythm	Animal rhythms	Play and character rhythms	Group games	Metric (Isometric exercises, or aerobic)
Baa Baa lack Sheep Hickory Dickory Dock Humpty Dumpty etc	Walking, Running, Jumping, Skipping etc.	Duck, Camels, Horses, Elephants, etc	See-saw, Swings, Fairies etc.	Cat and Dogs, Pussy cat Pussy cat, Statues, Kick ball Back to back. Fox and squirrel etc.	Basic dance step, Basic movement and phrasing Swinging and sustained

School must celebrate sports week and organize various competition through which self-control and confidence, good leadership and followership, sports skills, training to accept winning and losing graciously as well as a healthy attitude toward competition may develop in the students. More specifically a Programme of Yoga and Physical education shall bring about the following results:

1. Acquisition of good habits in food, sleep, hygiene and the use of physical exercise to regulate various functions of the body.
2. Development of skill, dexterity and endurance.
3. Development of a quick perception of the eye and ear and a quick response of all the parts of the body to any situation.

4. Development of grace, beauty, discipline, courage, confidence, cooperation, impartiality and fair dealing with others through games.

Conclusion

Yoga and physical education is being an integral part of the total educational process. It contributes to all round development of children and also should help in the spiritual development of the student. Participation in Construction Social Programme: 'The Programme of Action: NPE (1992)' has observed that studies have shown a positive correlation between participation of students in constructive social programmes and in sports and games. In the conclusion it can be said that physical education contributes to the development of total personality, helps people to utilize their leisure time in wholesome manner through recreate activities and also plays a great role to bring the handicapped people in 'mainstream'.

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Promoting Awareness & Status of Health and Physical Fitness of Students of Engineering College via a Health Report Card Approach

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ABSTRACT

The purpose of this study is to find out the awareness and status of Physical Fitness of student of Andhra University Engineering College. Ten obese from A.U. College of Engineering were selected as subjects. The students are staying in the hostel studying in various departments brought-up from rich family. Health questionnaires, health report card and fitness training were administrated and recorded to promote the health awareness and status of Physical fitness of obese students. The results shows that they have improved, and posses satisfactory health awareness and physical fitness after a period of 12 weeks training.

Introduction:

Physical Fitness is important throughout life, but is particularly crucial during childhood and adolescence. A sedentary life style is a major risk factor across the spectrum of preventable diseases that lower the quality of life and results in the higher morbidity and mortality. The US department of health and human services estimates but physical inactivity contributes to 4 lacks preventable deaths (17% total deaths) a year in the United States. Among the children and adolescents, physical inactivity is a strong contributor to overweight, and youths of overweight are the heightened risk for type 2 diabetes, high blood pleasure, high cholesterol, orthopaedic problems, pre mature physical developments, low self esteem, asthma, sleep apnea, and gallstones.

A study conducted in 2006 with 214 sixth grade students in Michigan found that students enrolled in Physical Education had similar grades and standardized tests scores as students who were not enrolled in physical education, despite receiving 55 minutes less of daily class room instruction fine for academic subjects. A research shows that healthy, well nourished children are more prepared to learn more likely to attend school and class and able to take advantage of educational opportunities. Studies demonstrate : undernourishment impacts the behaviour of children their school performance, and their ability to concentrate and perform complex tasks.

Regular physical activity not only helps to protect students and teens from this overweight associated problems, but also yields many additional benefit over

the short self esteem and reducing anxiety, stress and depression. There is also growing evidence that regular physical activity enhances learning and college achievement. Students who engage in daily physical activity have shown better academic performance, improved attitude towards education, higher concentration and improved class room behaviour.

Statement of the Problem:

The present study is to know the awareness and status of health and physical fitness of students of engineering college with regard to their physical conditions.

Methodology:

To achieve the purpose study 10 hostel students from AU College of Engineering, Visakhapatnam were selected as subjects. First the obese student were given health questionnaire to check their health awareness. The questionnaire containing 10 questions focuses on their awareness on speed, strength, endurance, agility, flexibility, body mass index, physical fitness, blood pressure, heart rate, and breathing rate. Pre test and post test taking for those students. After the pre tests it was concluded that they don't have as much of knowledge on the health fitness. To overcome it awareness classes on health and fitness were conducted once in a week for three months. Secondly they were all given health report card and field work out to reduce their obesity. Early in the morning they need to go for compulsory physical exercises, first 30 minutes walking or jogging, second strengthening exercises like sit-ups and push-ups and third stretching exercises for all body parts given continuously for one hour in six days a week. Only on Sundays they will be exempted from doing any exercises, but they will be engaged some recreational activities. First they were all interested in indoor games like caroms and chess, but after two weeks they have developed interest in outdoor games like volleyball, tennis, basket ball and football. The students were given calorie chart to follow their diet control. Every day they have been asked to take the daily calorific intake. For an average health adult, calorific intake should range between 1700 to 2500 per day. This amount of calorific intake must be equally distributed through all food groups in order to maintain optimum health. The food groups include carbohydrates, proteins, fats, vitamins and minerals. For an average adult diet, it is needed to consume 200 grams of carbohydrates (800 calories), about 100 grams of proteins (400 calories), 60 grams fat (540 calories) and unlimited vitamins and minerals. Adhering to this food chart will supply one with 2000 calories per day.

The students were asked to record their height, weight, body mass index, blood pressure, pulse rate in the health promote card by means of standard equipment such as stadiometer for height, weighing machine for weight. BMI chart for body mass index, sphygmomanometer and stethoscope for blood pressure as well as pulse rate. Heart beat per minute is calculated by the number of pulse count

in 30 seconds multiplied by 2. The height of the students that ranged from 160 to 175 cms, found no changes between pre test and post test.

Results and Discussion:

Table-1: Awareness Test.

Test	Mean	SD	df	t" value	Table value
Pre-test	24.9	70.6	9	8.1	1.8333
Post-test	8.77	14.78			

Table 1 shows the differences between the mean and standard deviation values of the awareness in pre-test and post-test of the selected variables. The post test value is significantly greater than the pre-test value ($24.9 < 70.6$ and $8.77 < 14.78$). t" value for awareness variables irrespective of different type of obese students in 8.1 against the table value 1.8333 at 0.1 level of confidence. Since the obtained t' value is greater than the table value it is implied that, the students improved a lot during the awareness classes on health and fitness conducted once in a week.

Table-2: Physical Fitness Score Card Test.

Variables	Number	Mean differences	SD Error	t' value	Table Value
Weight	10	11.80	3.425	10.8936	1.83
BMI	10	4.30	1.337	10.1666	1.83
Diastolic	10	10.80	7.005	4.8756	1.83
Systolic	10	21.00	16.944	3.9192	1.83
Pulse Rate	10	5.80	2.898	6.3283	1.83

Table value with 9 df 1.83

The table 11 shows that the obtained dependent t-ratio values between the pre and post test means on weight, BMI, Diastolic, Systolic and Pulse rate are 10.8936 , 10.1666, 4.8756, 3.9192 and 6.3283 respectively. Since, the obtained 't' ratio values are greater than the table value 1.83, it is understood that training programmes have significantly improved the fitness such as ideal body weight,

Body mass Index, normal Blood pressure (Diastolic and Systolic) and accurate Pulse rate. Dependent 't' test statistics reveals that the difference between the pre test and post test of all the selected variables are found significant.

Conclusion:

The following recommendations were made:

Students and youths from 10-20 years of age, were suggested to carry out an average of at least 60 minutes exercises per day and up to several hours of at least moderate intensity physical activity. More vigorous intensity activities should be incorporated or added when possible, including activities that strengthen muscle and bone. Muscle and bone strengthening activities should be incorporated on at least 3 days of the week. Cardiorespiratory fitness had the strongest association with BMI status. The Physical Directors play a vital role in preventing and combating obesity in students. Physical Directors should be motivated to organize interesting games, PE lessons, College sports activities and competitions for both normal and overweight students. Through diagnosis, the negative features of the obese students were identified and various tests, exercises and awareness classes on speed, strength, endurance, agility, flexibility, body mass index, physical fitness, blood pressure, heart rate and breathing rate were given. It aided a lot in gaining ideal body weight, body mass index, normal blood pressure (Diastolic, Systolic) and accurate Pulse rate, thereby maintaining a hale and healthy physique.

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Study of Attention Distraction During Multi Physical Task Performances

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Introduction

Attention pays vital role not only in the fields of physical education and sports but also in all aspects of human life. The importance of attention is clear. As we know attention increases efficiency attention improves sensory discrimination, attention is useful for acquisition of skill and attention is helpful for remembering.

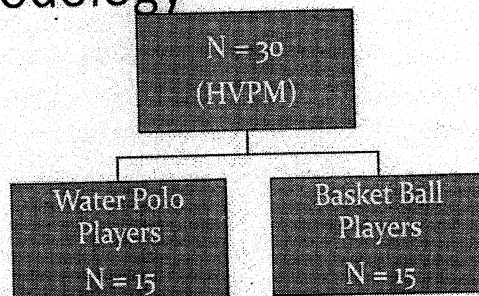
When attention is paid to certain specific areas or objects, concentration helps to place information in working memory which facilitated persons to recall the information in need. Other things which are not properly attended to be not remembered well and as such are forgotten as soon as possible.

It is presumed that a person has a limited capacity for attention and people can pay attention to only one task at a time, many people experiences trouble with attention due to excessive active or impulsiveness. On the basis of above statement the researcher will try to find out the attention distraction during multi physical task.

Purpose / Objective of Study

- The purpose of this study was to investigate the attention destruction when two tasks are performed at same time in young male water polo and basketball players
- To find out the dominance of the players
- To find out the relationship between type of game and attention control

Methodology



Co - efficient or division of the attention was taken with the help of attention control board and Stop watch

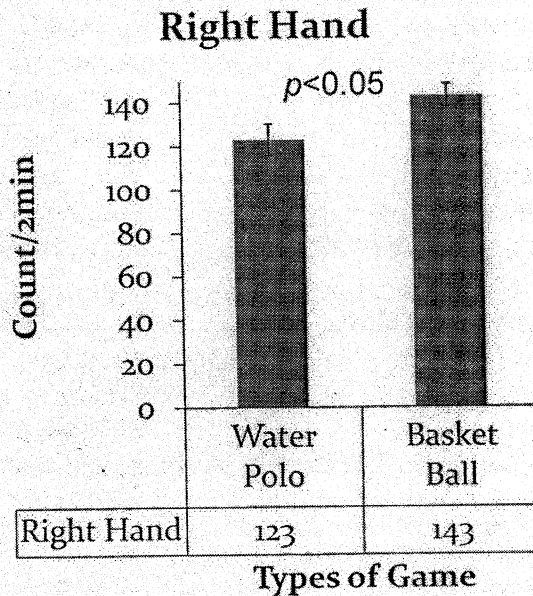
Statistical Design

- Descriptive statistics
 - Mean
 - SD
 - SE
- Inferential statistics
 - Independent t – test

Table of Right Hand Activity

V	Water Polo				Basket Ball				t-test	
	Mean	SE	Mean ± SE	SD	Mean	SE	Mean ± SE	SD	t value	p value
SI	123.00	7.23	123 ± 7.23	27.99	143.00	5.29	143 ± 5.29	20.48	2.53	0.02

V- Variable



- All the players were found right hand dominant
- The right hand activity of basket ball players were significantly ($p < 0.05$) higher

Table of Left Hand Activity

V	Water Polo				Basket Ball				t-test	
	Mean	SE	Mean±SE	SD	Mean	SE	Mean±SE	SD	t-value	p-value
S2	174.133	5.8300	174.14±5.84	22.57	232	9.29	232±9.3	36.00	5.3372	0.01

V- Variable

Result of Left Hand Activity

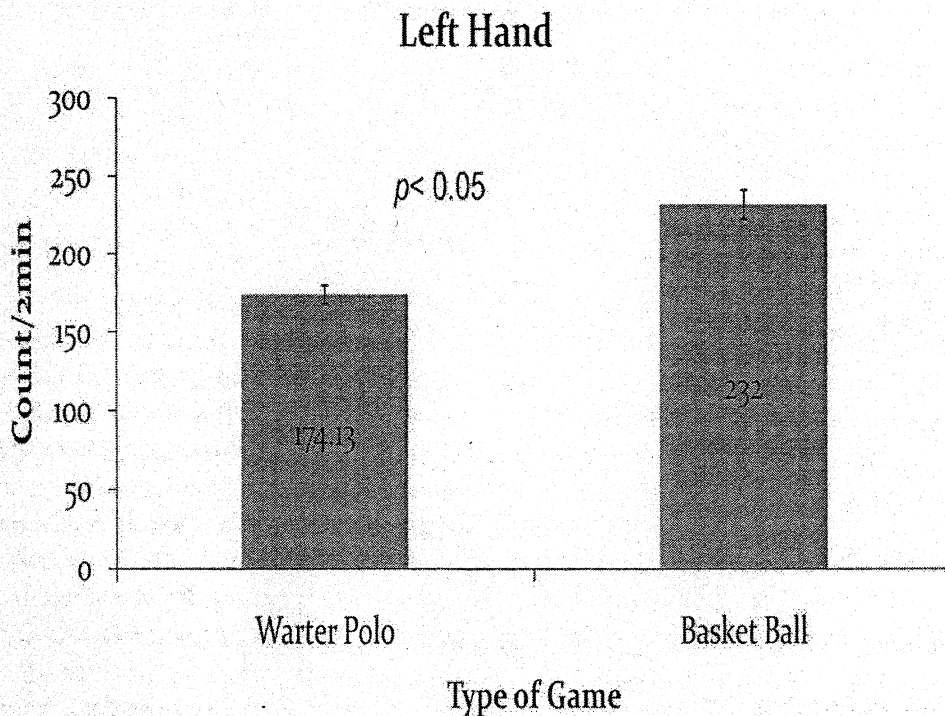
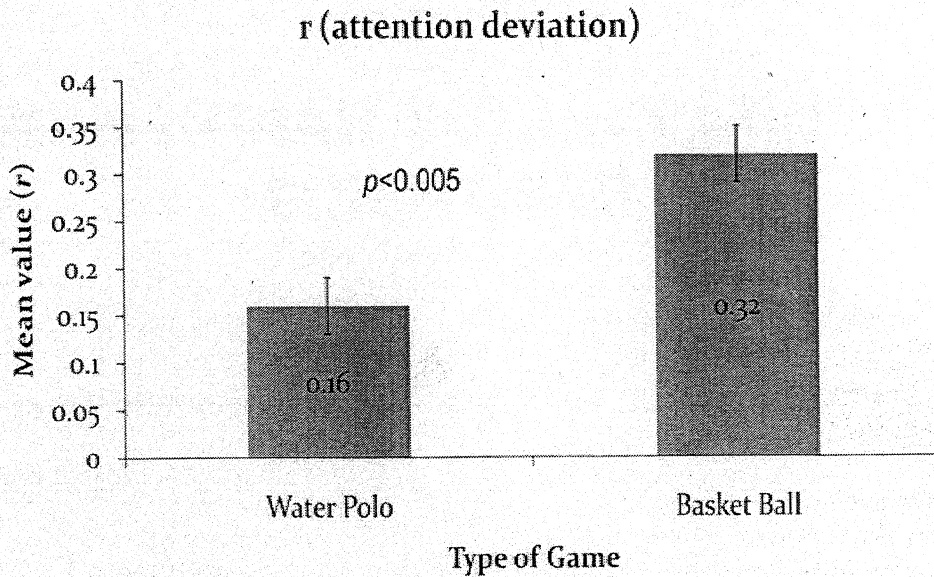


Table of attention deviation during two physical task performances

V	Water Polo				Basket Ball				t-test	
	Mean	SE	Mean±SE	SD	Mean	SE	Mean±SE	SD	t-value	p-value
R	0.1575	0.02875	0.16±0.03	0.111	0.3236	0.027	0.33±0.03	0.108	4.3995	0.01

V-variable

Result of attention deviation during two physical task are performed at a time.



Conclusion

- All the players were found right hand dominant in both studied groups
- Significant difference was witnessed between the groups in activity level
- Most of the subjects were found multitasking individuals
- Water polo players were found significantly multitasking individuals than that of basket ball players
- Multitasking ability and adaptability may be overlapping but separate constructs that draw on overlapping (but not identical) sets of cognitive abilities.

Significance of Study

1. The result of the present study are helpful to teach complex skill effectively
2. The results of this study are applicable to practitioners and researchers in human factors to assess multitasking performance in real-world contexts and with realistic task constraints. We also present a framework for conceptualizing multitasking adaptability on the basis of the profiles derived from performance on tasks with consistent versus increased difficulty.