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The Attitude of Out-of-State Physical Education College Students Towards Physical Education in Maharashtra State

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Abstract :

The main purpose of this study was to measure the attitude of students towards Physical Education belonging to different states of India, studying in Aided and Non-aided physical education colleges of Maharashtra state. A sample of 600 students of both sexes was elected randomly from eight Aided and twenty-two Non-aided Physical Education Colleges of Maharashtra State. An Attitude Scale based on 'Likert five point scale' was used for data collection. Mean and Chi-square were the main statistical measures that was used by the researcher for analysis and interpretations of data. The findings of the study led to the following conclusion that 1) students belonging to Bihar states showed highly favourable attitude towards physical education in respect to other state's students, while students belonging to M.P. showed unfavourable attitude towards physical education. 2) Students belonging to different states of India differed significantly in respect to their attitude towards physical education. 3) Aided and Non-Aided colleges students differed significantly in respect to their attitude towards physical education. **Key words** : Students, Attitude, Colleges, Physical Education.

Introduction :

Physical education is vital to all aspects of the normal growth and development of children and youth, - not only physical but social and emotional growth as well. Enhanced learning, better concentration, improved self-control and self-confidence as well as promotion of healthy, positive and lifelong attitudes towards physical activity are well documented benefits of quality physical education in schools. In addition, school physical education establishes the foundation of skills for a lifetime of participation while at the same time building a natural immunizing effect against many sedentary lifestyle diseases. An investigative world-wide survey of the state and status of physical education in schools by **Marshall and Hardman, (1998)** reveals that school physical education is in a perilous position in all continental regions of the world. Specifically, the article addresses issues of legal status and actual implementation, restricted or decreasing curriculum time allocation, subject status and attitudes of head teachers, other teachers and parents, inadequacies in financial, material and human resources and teacher preparation, curriculum trends, as well as skepticism about the subject's future. Concluding comments allude to the main sources of concern and international efforts to sustain physical education in schools in the next millennium. **Penney (2000)** explores the relationship between excellence in the context of physical education (and the National Curriculum for Physical Education (NCPE) in England and argued that discourses of performance in sport strongly 'frame' these definitions, while the notion of *educational* excellence remains apparently underdeveloped in the context of physical education. The processes of policy development, the structure of curricula and the histories (personal and collective) of the subject and profession are identified as critical influences (and origins of strong discursive frames) that collectively reinforce a direct association between excellence in physical education and excellence in sport. Parallel texts, associated with another subject (music), are examined to highlight possibilities for the development of alternative understandings and definitions of

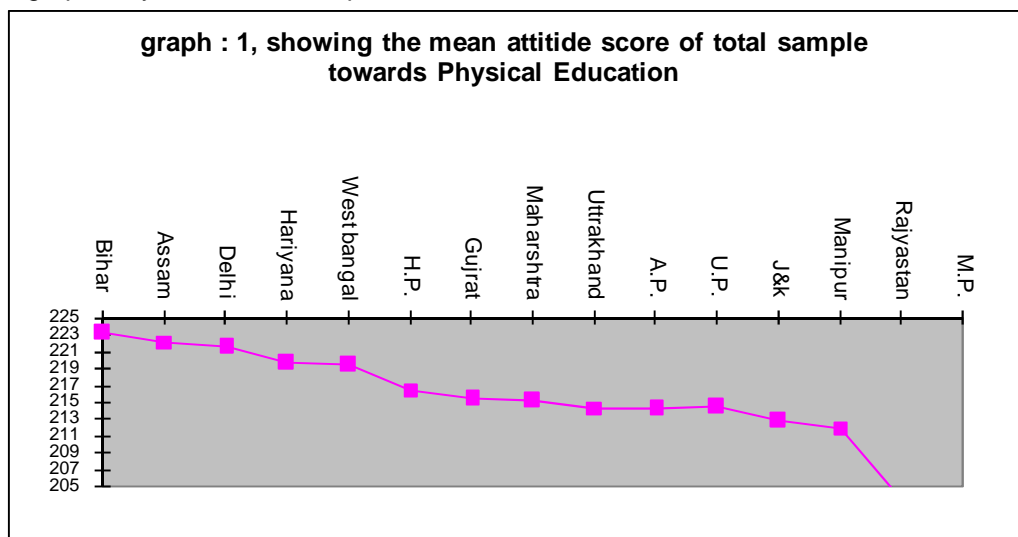
achievement and excellence in physical education, informed by and privileging educational discourses. **Langford (2004)** found that differences in student-teacher ratios may also contribute to attitude differences between the two countries. In the Czech Republic, the maximum physical education class size in high schools is 24 students, but rarely does actual class size at any grade level exceed 20 students. By contrast, National Association for Sport and Physical Education (2001) data show that only 25.5% of states have a policy on the maximum allowable student-to-teacher ratio for physical education for senior high schools. For states that do, the average maximum allowable ratio is 34:1. Among those that do not cap class size such as Georgia, Texas, and Utah, high schools classes often have 40 or more students on one physical education teacher. The importance attached to physical education by teachers and administrators in the two countries is also a likely determinant of how students perceive the subject. Traditionally the careers in physical education and sports have focused on teaching and coaching in schools and colleges or universities. Recently, the Govt. of Maharashtra has Centralized its Admission process for the Physical Education Courses i.e. B.P.Ed. & M.P.Ed. The initiatives like this playing a great role in upgrading the standard of Physical Education in Maharashtra and also playing a vital role in forming the favourable attitude among the students towards physical education.

Objectives of the Study :

- To find out the attitude of students belonging to different parts of India towards Physical Education.
- To compare the attitude of aided and unaided college students towards PE.
- To compare State wise attitude of students towards Physical Education.

Material and Method :

The sample comprised of 15 students each from 28 unaided/private colleges, while 20 students each from 8 aided/granted colleges. Thus total 600 students selected on random basis in sample from 36 physical education colleges located in different parts of Maharashtra State Viz. Marathwada, Vidarbha, Kokan and Khandsh. The researchers used 65 items self made attitude scale based on 'Likert five-point scale (1932)', in which 33 statements were favorable and 32 statements were unfavorable. The reliability of the Scale was calculated with the help of test-retest method and it was found 0.81 (N=150). The Serial order of mean value of out-state-students studying in Maharashtra has been arranged graphically as below in Graph -1



The graph clearly shows that students of Bihar state had more favorable attitude towards physical education in respect to other states, while M.P. state students showed the most unfavourable attitudes. Moreover, the students belonged to Delhi, Hariyana, West bangal, Assam, H.P., Gujrat Maharashtra Uttarakhand, A.P. and U.P. showed highly favourable attitude towards physical education. Whereas similarity in responses has been seen in students of J&K and Manipur as the mean difference is very less among them.

Table no. 1 showing the significant of difference between mean attitude scores of Aided and Unaided students towards physical education

Respondents	N	Mean	SD	d.f.	't' value
Aided College's students	160	222	28.7	598	* 3.45
Unaided College's student	440	212.75	29.81		

$t_{tab} = 1.96$ at 0.05 level of significance

*significant

Table No.- 1 shows that the calculated value 3.45 is found much higher than the tabulated 't' value at 0.05 level of significance. It means that the students of aided and unaided colleges differed significantly in respect to their attitude toward physical education. It can also be inferred that aided college's students have the better attitude than the unaided/private college's students. This difference may be due to the availability of poor facilities, more fees, and lack of qualified teachers in unaided/private institution.

The Chi Square test is also used to observe the relationship in between attitude of different state students towards physical education. In this regard, the calculated X^2 value 313.75 is recorded much higher than the tabulated value of X^2 at 238 df for 0.05 level of significance i.e. 270.77 Which meant that the difference is significant. Hence, it can be concluded that the out-of-state students in Maharashtra differed significantly in respect to their attitude towards physical education. In India, Every state has its own separate policies and programme for the development of physical education. In many states, the physical education curriculum is compulsory at school level with separate qualified physical education personal, while part time and unqualified teachers are looking the physical education in some states. Similarly, imparity in employment policies for sports persons, sports scholarships, awards, sports facilities and culture of the States lead to create different modes of attitude among students.

The findings of the study lead to following

Conclusions :

Students belonging to Bihar states showed highly favourable attitude towards physical education in respect to other state's students, while students belonging to M.P. showed unfavourable attitude towards physical education.

Students belonging to different parts of India differed significantly in respect to their attitude towards physical education.

Aided and unaided/private colleges students differed significantly in respect to their attitude towards physical education.

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Causes Of Class-I Obesity Of 9 – 10-Year-Old Pupils At Kim Dong Primary School, In Ha Noi City

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Abstract

In order to identify causes of class-I obesity of pupils from 9 to 10 years old at Kim Dong primary school in Ha Noi, we conducted a comprehensive survey on the current status of pupils' motor activities at school and at home, using energy consumption formulas to assess their nutrition supply versus actual nutritional needs, and evaluating their daily habits. Keyword: 9-10-year-old pupils; class-I obesity; living habits, motor habits; nutritional needs; provide energy.

Introduction

According to the World Health Organization, overweightness or obesity is defined as abnormal or excessive fat accumulation that may affect health [6]. There are three main causes of obesity in the community: genetic factor, food consumption, and exercise plan. However, in assessing the rapid growth of obesity in the world today, epidemiologists report that the increasing trend of overweightness in the community is mainly due to energy-rich diets and reduction of physical activities [2], [5]. Child studies show that children who are physically inactive and have high static duration are at higher risks of obesity (at 1.34 times higher than that of other children) [3]. A survey, conducted at the Healthcare Unit, Kim Dong Primary School, indicates that among the 225 obese pupils age 9 or 10, there are more boys than girls with 58 males / 52 females (age 9) and 59 males / 56 females (age 10). Compared with the results of the demographic survey in 2000 in big cities, the rate of 9 and 10-year-olds at Kim Dong Primary School in Ha Noi with class-I obesity has increased by nearly 5%. Obesity affects children's psychology negatively: they are teased and nicknamed leading to guilty emotions and psychological pressure. The Deckelbaum's study in America revealed that overweight children often suffer from having low self-esteem, fear to communicate with others, anxiety, depression, and feeling abandoned more often than ordinary children [1].

According to a study by the American's public health program on the prevention and control of obesity in schools, since children spent their daytime mostly at schools, they should be intervened to exercise and adjust diet at school [4]. Rate of obesity of pupils at Kim Dong Primary school has continuously increased, resulting in a need to study causes and weight-loss solutions for the pupils.

Methods

Method of synthesizing and analyzing materials to summarize published scientific knowledge.

Method of pedagogical observation is used to evaluate pupils' activities at school.

Method of Medical Screening Test, using Harris-Benedict's energy evaluating method, is used to estimate an individual's basic metabolic rate (BMR) and daily kilocalorie requirements. The estimated BMR value is multiplied by a number corresponding to the individual's level of exercise.

BMR formula (Basal Metabolic Rate):

Male: $[(13.397 \times \text{Weight kg}) + (4.799 \times \text{Height cm}) - (5.677 \times \text{Age}) + 88.362]$

Female: $[(9.247 \times \text{Weight kg}) + (3.098 \times \text{cm Height}) - (4.330 \times \text{Age}) + 447.593]$

Based on calorie consumption in a resting day, volume of calorie consumption in accordance with level of exercises (TDEE) should be calculated using the following formula:

TDEE (Total Daily Energy Expenditure)

Type of individual:

Type 1. Inactivity: $\text{BMR} \times 1.2$

Type 2. Light exercise: 1-3 times / week: $\text{BMR} \times 1.375$

Type 3. Moderate exercise: 3-5 times / week: $\text{BMR} \times 1.55$

Type 4. Mobility: 6-7 times / week: $\text{BMR} \times 1.725$

Type 5. Heavy exercise: More than 7 times a week: $\text{BMR} \times 1.9$

The result is the amount of necessary level of calorie consumption on a daily basis to maintain the current weight. The method of interviewing teachers and parents is used to study the pupils' lifestyles and food energy.

Mathematical statistics is used to analyze research data.

Results

According to statistics from various sources, factors affecting weight gain or loss include daily intake of calories, exercise and lifestyle. Therefore, to investigate the causes of class-I obesity of 9 and 10-year-old pupils at Kim Dong Primary school in Ha Noi, we conducted the survey on three aspects: Exercise, nutrition and lifestyle of pupils.

A survey on current status of motor habits of 9-and-10-year-old pupils of class-I obesity at Kim Dong Primary school in Ha Noi.

To study the research pupils' motor habits at school, we interviewed their form teachers and observed their actual performance. Compulsory exercise time consists of 2 periods of physical education per week (40 minutes per period) and 5 minutes of exercise during breaktime; In addition, there are extra 40 minutes of elective physical education activities per week. The total exercise time is divided into 5 school-day-sessions.

Table 1. Motor status of 9 - 10-year-old pupils with class-I obesity in Kim Dong Primary school in Ha Noi (n = 225)

No.	Timetable	Content	Time/ activity	Activity ranking %			
				Inactivity	Light	Moder-ate	Heavy
1	6:45-7:15	Personal hygiene practices, and having breakfast	30'	100			
2	7:15-8:00	Going to school	10' – 25'				
		Walking			22.7		
		Having parents drive to school		81.3			
		Studying	140'		100		
3	8:00-11:00	Exercising	21'			77.3	22.7
		Resting	20'	100			
4	11:00-12:00	Free, having lunch	90'		100		
5	12:00-14:00	Taking a nap	120'				
6	14:00-16:00	Studying	80'	100			
		Resting and eating snack	30'	100			
		Free	8'		68.2	31.8	

Table 1 shows that the time for exercising at school is limited. Every day, children learn for 220 minutes; resting, eating and sleeping last for about 170 minutes; physical activity lasts for about 30 minutes. The rate for motor habits and other activities only account for an insignificant proportion of 30 / 390 minutes which is about 1/13. In terms of pupils' physical activities, pupils exercised little or did no exercises at all. About 77.3% of the pupils are moderately active (sweating and normal facial tone), 22.7% are active (sweating, red face), which means that the majority of children did not actively participate in training during their physical education lessons. Other types of activities such as sitting, eating and sleeping are all gentle or inactively. To study the home-based activities of the research group of pupils, we distributed questionnaires to parents and instructed them to assess their children's habitual movement. Specific results are as follows:

Table 2. Home-based motor habits of 9 and 10 year-old pupils at Kim Dong Primary school in Ha Noi with class-I obesity (n = 225)

No.	Timetable	Content	Activity ranking %			
			Inactivity	Light	Moderate	Heavy
1	16:30-17:00	Coming home				
		Walking		22.7		
		Having parents drive to school	81.3			
2	17:00-8:30	Personal hygiene practices	100			
		Watching TV, reading books				
		Doing housework		27.2		
		Going out	0			
		Attending extra classes	0			
		Doing exercise	0			
3	18:30-21:30	Having dinner	100			
		Doing homework				
		Watching TV				
		Reading books				
		Playing games				
4	22:00	Sleeping	100			

Table 2 shows that after school (at about 16:30 – 18:30), pupils are usually driven home by parents. Then in 2 hours they mainly watch TV, read books, 100% of which are considered inactivity. Only 27.2% of pupils help their parents with light work, and no one attends extra classes or goes out. From 18h:00 – 21:30, they review lessons or do homework, then read books, watch TV, play computer games or surf mobile phones, which are agreed to be inactive by 100 % of parents. In addition, we interviewed parents about their children' weekend activities. In fact, most parents let their children be free to do what they want, or rest, visit relatives, and learn extra subjects such as foreign languages, drawing or music. The number of obese pupils working out at the weekend is very low at about 6/22 (equivalent to 27.3%).

From the research we found that pupils at Kim Dong primary school in Ha Noi are generally in a state of physical inactivity, which is one of the leading causes of obesity. Thus, the school and the family need to work together to solve the problem.

A survey on the nutritional status of 9 and 10-year-old pupils with class-I obesity at Kim Dong Primary school in Ha Noi.

To investigate the nutritional status of 9 and 10 year old pupils at Kim Dong Primary School in Ha Noi with class-I obesity, we first estimate their baseline metabolic rate (BMR). Then we employing the Harris-Benedict method of energy calculation for inactive people, using the formula: TDEE = BMR x 1.375 to find the total daily energy consumption to maintain weight of obese pupils. The results are as follows:

Table 3. Daily energy intake of 9 and 10-year-old pupils in Kim Dong Primary school in Ha Noi with class-I obesity (n = 225)

No.	Research subjects	BMR Index (Kcal)	TDEE Index (Kcal)
1	9-year-old obese male pupils (n = 58)	1312.894	1805.229
2	9-year-old obese female pupils (n = 52)	1349.433	1855.485
3	10-year-old obese male pupils (n = 59)	1449.084	1992.49
4	10-year-old obese female pupils (n = 56)	1426.869	1961.944

It can be seen that daily energy intake of pupils with class-I obesity is 100kcal higher than their peer's energy requirement with reference to the Preventive Medicine Department - the Institute of Nutrition (1700 kcal - 1900 kcal).

After calculating the daily energy needs to maintain weight of the pupils, we used the Vietnam Eiyokun, a Japanese software, to calculate the energy intake in 24 hours from meals at home and at school to assess the energy supply versus the actual energy needs to maintain obese pupils' weight.

Table 4. Energy provided to 9 and 10-year-old pupils with class-I obesity at Kim Dong primary school in Ha Noi

Research pupils		Minimum energy supply (Kcal)	Maximum energy supply (Kcal)	Average
9-year-old males (n = 8)	\bar{X}	2070	2226	2148,35 ± 78
9-year-old females (n = 7)	\bar{X}	2130	2292	2211.82 ± 81
10-year-old males (n = 9)	\bar{X}	2237	2427	2332.10 ± 95
10-year-old females (n = 8)	\bar{X}	2221	2395	2409.86 ± 88
Energy need according to TDEE	9-year-old males			1805.23
	9-year-old females			1855.49
	10-year-old males			1992.49
	10-year-old females			1961.94
Difference between Energy supply and TDEE energy	9-year-old males	+ 264,77	+ 420,77	+ 343.12
	9-year-old females	+ 275,49	+ 436,51	+ 356.33
	10-year-old males	+ 244.51	+ 434,51	+ 339.61
	10-year-old females	+ 259.06	+ 433.06	+ 347.92

Statistical results on energy provided to 9 to 10-year-old boys and girls show that the pupils are excessively supplied with too much energy. The difference between the average energy supply and energy needs to maintain current weight following TDEE exceeds 339.61Kcal - 356.33Kcal. The lowest calorie intake (9-year-old boys) also exceeds the threshold of 264.77 Kcal and the highest for 9-year-old girls exceeds 436.51 Kcal. This excess energy will continue to accumulate, so the child keeps gaining weight.

A survey of living habits of 9 and 10-year-old pupils with class-I obesity at Kim Dong primary school in Ha Noi in order to investigate the pupils' living habits, we conducted interviews with their parents.

Table 4: Living habits of 9 and 10-year-olds with class-I obesity at Kim Dong primary school in Ha Noi (n = 225)

Factors		Agree	%
Family/ Genetics	Parents are overweight	70	31.1
	Parent is overweight	78	34.7
	Parents are normal	77	34.2
Eating habit	Fatty food	127	56.4
	Sweet food	84	37.3
	Junk food (instant noodle, French fried, pop corn, snack, etc)	162	72
	Fast eating	212	94.2
Motor habit	Active	91	40.4
	Inactive (reading books, watching TV, playing games)	134	59.6
	Dislike doing housework	225	100
Knowledge of preventing children from obesity	Understanding food energy	5	2.2
	Understanding the amount of food consumption to lose weight	19	8.4
	Understanding the linkage between motor habits and health	32	14.2
	Care and solutions for losing weight	23	10.2
	Allowing children to develop naturally	202	89.8

The interview shows that family/genetics factor has a relatively large effect on the child's risk of obesity. In 70 out of 225 families, both parents are overweight; 78 families has one overweight parent, only 34.2% families have both parents who have normal weight. Obesity in parents leads to family's inappropriate eating habits that somehow affect the child's obesity.

In terms of eating habits, 56.4% children love eating fatty foods, 72% of them love eating snacks with ready-made foods. Pupils with class-I obesity often eat quickly with obesity rates of 94.2%. In terms of motor habits, about 40.6% parents think that children are active and 59.4% think that children like static activities such as reading books, watching TV, and playing video games. In addition, 100% parents think that their children dislike housework.

We found that 9 and 10-year-old children need appropriate parental care to help them grow healthily. However, when we interviewed parents about knowledge of obesity prevention, it turned out they did not really care about their children' obesity. There are 89.8% parents letting their obese child grow uncontrollably without thinking about a weight-loss solution for him. The vast majority of parents do not understand about food energy and the amount of nutrients needed to stay healthy. We found that parents need to change their perception about eating habits for their children and the whole family. Also, they need to be active in balancing diet, nutrition and lifestyle to lose weight and improve their children's health.

Conclusion

One of the causes leading to the 9 and 10-year-old pupils' obesity at Kim Dong Primary school in Ha Noi is little time for physical activities compared to other activities at school and at home. Furthermore, almost forms of activities during the day are light. The main reason is that the daily energy provided to pupils is way higher than the expected amount, leading to pupils' gaining weight. An important cause is the family/genetics factor with unhealthy living habits, especially due to parents' inadequate understanding about obesity prevention.

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A Study on Knowledge about risk factors of Hypertension among the Rural population

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Abstract

Hypertension is the one of the important contributing factor of heart diseases. Although hypertension can be controlled by targeting the risk factors but still hypertension remains uncontrolled. Knowledge is very important for one to follow a healthy lifestyle and prevent the illness. If the people not having knowledge regarding contributing risk factors, one will have less influence to change. By considering the importance of knowledge present study aimed at assessing the level of knowledge about the risk factors of hypertension. The present cross-sectional study, conducted on a rural population of Jewargi Taluk of Kalaburagi district, Karnataka on individuals aged 18 years and above. A total of 263 participants were selected by multi-stage random sampling technique. The questionnaires for data collection comprised of a Demographic data sheet and Hypertension knowledge questionnaire (Kamacharya, 2012). Results were analyzed by using descriptive statistics. From the findings it was observed that most of the participants reported salt intake (54%), stress (33.5%) high fat diet (19%) as the major risk factor of hypertension. Family history (1%), smoking (4.90%), lack of physical activity (6.50%) as the contributing risk factors of hypertension and 33.50% reported they were not aware of any of the risk factors.

Introduction:

India, a developing country with a population of more than 1 billion is undergoing a rapid epidemiologic transition characterized by an increased prevalence of chronic disease. Kumar, Shankaregowda & Revathy (2011) reported that in India 3.78 million (40.4%) deaths occurred in the year 1990 due to chronic diseases and is expected to reach 7.63 million (66.7%) by 2020. Prevalence of lifestyle disease and its types are changing quite alarmingly. The World Health Organization has recognized India as one of the nations with a maximum number of lifestyle related disorders in the near future. The most common lifestyle related disorders are hypertension, heart-related diseases, obesity, cancer and diabetes. The leading causes of death due to non-communicable diseases in 2012 were cardiovascular diseases (17.5 million, or 46.2% of non-communicable disease deaths), cancers (8.2 million, or 21.7% of non-communicable disease deaths), respiratory diseases, including asthma and chronic obstructive pulmonary disease (4.0 million, or 10.7% of non-communicable disease deaths) and diabetes (1.5 million, or 4% of non-communicable disease deaths). Thus, these four major non-communicable diseases were responsible for 82% of non-communicable disease deaths (WHO, 2014). According to the World Health Organization, recent estimates show that hypertension affects more than a third of adults aged 25 and above, accounting for about a billion people worldwide and contributes to nearly 9.4 million deaths from cardiovascular diseases each year (WHO, 2013). It is responsible for causation of 50% of coronary heart disease and almost two-thirds of strokes (Cutler et al., 2008). Further, it has been estimated that by the year 2030, 23 million cardiovascular deaths are projected to be due to hypertension, of which about 85% cases will be from low resource settings and developing nations (WHO, 2013).

Hypertension is an important health problem in both urban and rural areas of India. According to WHO (2013), 23.10% of men and 22.60% of women over 25 years of age suffer from hypertension. Knowledge is very important for one to follow a healthy lifestyle and prevent the illness. The knowledge about hypertension and the risk factors are often stressed on their utility. If the individual is not having knowledge regarding the impact of unhealthy behaviour on health, one will have less influence to change. Knowledge can enable one to make an informed decision regarding health. In most cases, without accurate information and knowledge, individuals can neither make nor be expected to make informed decisions about their own health or that of others for whom they are responsible. By considering the importance of knowledge in prevention and management of the disease, present study aimed to assess the level of knowledge about the risk factors of hypertension.

Methods:

Research Design:

The present cross-sectional, quantitative study used a descriptive research design to assess the level of knowledge about hypertension.

Study Area:

Study area for the present study was Jewargi taluk, is one of the backward taluks in the Karnataka and placed in 174th position among 175 taluks of Karnataka on the basis of various socio-economic indicators (Institute for Human Development, 2008). Health index of taluka was 0.551 (DHDR Gulbarga 2008). Based on 2011 Census data, total numbers of villages in Jewargi taluk were 159 with the population of 2.96 lakhs people.

Population, sampling technique, sample size and procedure:

Population for the present study included all the individuals who were residing in Jewargi taluk in the age group of 18 and above; multi-stage random sampling method was used to select the 263 participants from three villages of Jewargi taluk namely (Niradgi Aralgundgi and Kallur). Following sampling procedure was followed to select the participants. Initially, researcher had selected 3 villages randomly from Jewargi taluka by lottery method, after selecting villages, unique number was given to each households in all the three villages and selected randomly by lottery method, finally, all the households having persons aged 18 year and above fulfilling the selection criteria were included in the study and selected randomly by lottery method.

Survey Instruments:

The questionnaire for data collection comprised of a socio-demographic data sheet and Hypertension knowledge questionnaire (Kamacharya, 2012).

Data collection procedure:

Data collection was done at the household level by the researcher. All eligible members of the selected households were provided information on the study objectives and were enrolled with their consent. After selecting the participants through lottery method, rapport was established with the members and they were explained the purpose of the study. Before starting the interview the researcher had administered the screening tool to find out whether the participant meet the criteria of the study. If the participant met the inclusion criteria, questionnaires were administered to them. Questionnaires include the items related to socio-demographic information and hypertension knowledge.

Statistical analysis:

All the data collected were entered in to the SPSS-20. Descriptive statistics used to analyze the results.

Results

Table:1 Distribution of socio demographic characteristics of study participants

	Demographic Variables	Male (N=123) n%	Female(N=140) n%	Total N%
Age Group	18-30	25(20.3)	45(32.1)	70(26.6)
	31-45	38(30.9)	42(30)	80 (30.4)
	>46	60(48.9)	53(37.8)	113 (43)
Education	No formal schooling	55 (44.7)	110(78.6)	165(62.7)
	Less than primary school	29 (23.6)	12(8.6)	41 (15.6)
	Primary school completed	7(5.7)	9(6.4)	16(6.1)

	Secondary school completed	2(1.6)	0	2(.8)
	High school completed	14(11.4)	4(2.9)	18(6.8)
	College/Graduation completed	16(13.0)	4(2.9)	20(7.6)
	Post-Graduation degree and above	0	1 (0.7)	1 (.4)
Occupation	Government employee	2(1.6)	0	2(.8)
	Non-government employment	5(4.1)	2 (1.4)	7(2.7)
	Self- employed	44(35.8)	13(9.3)	57(21.7)
	Non-paid	3(2.4)	5(3.6)	8(3.0)
	Student	4(3.3)	2(1.4)	6(2.3)
	Home maker	0	37 (26.4)	37(14.1)
	Unemployed able to work	4(3.3)	2(1.4)	6(2.3)
	Unemployed Unable to work	21 (17.1)	20(14.3)	41 (15.6)
	Daily Wage Labourers	40(32.5)	59(42.1)	99(37.6)
	Marital Status	Never married	14(11.8)	8(5.7)
Currently Married		105(85.4)	113(80.7)	218(82.9)
Separated		1(.8)	1(.7)	2(.8)
Widowed		3(2.4)	18(12.9)	21(8.0)
Religion	Hindu	118(95.9)	132(94.3)	250(95.1)
	Muslim	4(3.3)	7(5.0)	11(4.2)
	Christian	1 (.8)	1(.7)	2(.8)

From the Table: 1 it was observed that majority of the participants were above the age group of 46 i.e. 43% (Male 48.9% vs. female 37.8%), formal education i.e. 62.7% (Male 44.7% vs. Female 78.6%), daily wage labourers overall 37.6% (Male 32.5% vs. female 42.1%), Self-employed overall 21.7% (Male 35.8% and Female 9.3%), unemployed unable to work overall 15.6% (Male 32.5% vs. Female 42.1%). Majority of the participants were married overall 82.9% (Male 85.4 vs. Female 80.7%), belonged to Hindu religion overall 95.1% (male 95.9% vs. female 94.3%) .

Table: 2 Percentage of the knowledge about risk factors of Hypertension

Reasons	N=263	%
Family or Heredity	1	0.40%
High Salt Intake	142	54.00%
High Fat Diet	50	19.00%
Obesity	16	6.10%
Smoking	13	4.90%
Excess Alcohol Consumption	16	6.10%
Stress	88	33.50%
Lack of Exercise	17	6.50%
Unknown Reasons	12	4.60%
Don't Know	88	33.50%

Table 2 shows Percentage of the knowledge about risk factors of Hypertension. From the results it was observed that 54 % of participants reported high salt intake as a reason to develop hypertension, 19% of participants reported consumption of high-fat diet as a reason to develop hypertension, 6.10%, 4.9%, 6.10% reported obesity, smoking and excess alcohol consumption as reasons to develop hypertension respectively. 0.40%, 33.5%, 6.5%, 4.6% reported, family or heredity, stress, lack of

exercise and unknown reasons to get hypertension respectively. 33.5% reported they didn't know the reasons for having heart disease.

Discussion:

The objective of the present study was to assess the level of knowledge about the risk factors of hypertension. In the study most of the participants reported salt intake, stress and high fat diet as the major risk factor of hypertension. This findings were similar to the study by Demaio et al. (2013) who reported that the most risk factors for hypertension known to the subjects were excessive salt intake (77.4%), on the other hand a study by Shaikh et al. (2011) reported that more than 70% of patients were aware that stress, high cholesterol and obesity were the risk factors of hypertension and 52.7% from them were not aware that physical activity were risk factors for hypertension. In the present study family history, smoking, obesity and lack of exercise as the less contributing risk factors of hypertension and most of the participants reported they were not aware of any of the risk factors. This may be due to poor educational level among the participants and they belong to the rural areas where the exposure to get the knowledge is limited.

Conclusion:

From the findings of the present study, most of the participants reported that only salt intake, stress and high fat diet as the major risk factors of hypertension but literature report physical activity, smoking and family history were also the major contributing of the hypertension which most of the participants were not aware apart from these most of the participants reported they were not aware of any of the risk factors, which indicates there is a need to conduct the intervention to improve the knowledge and to prevent the prevalence and maintenance of hypertension.

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“Yoga Changes the Life Style”

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Abstract :

Yoga provides the body with agility, strength, flexibility, free of diseases and aches, endurance and efficiency. Secondly mind plays an important role in the learning process. Yoga assures the mind with alertness, awareness, attention concentration, peace, assimilation, retention and reproduction. Thus there is a higher need of Yoga for the health and physical fitness.

Introduction :

Yoga is an ancient discipline. It is recognized as one of the most important and valuable gifts of our culture. The modern era, with the development of science and technology, provides man more comforts for his basic necessities. But these comforts man faces lot of problems, which cannot be solved only by the above facilities. Today the world is looking for solutions to solve the menacing problems of unhappiness, restlessness, emotional imbalance, hyper activity, tension, stress, etc. All his faculties physical, mental, intellectual and emotional develop in a harmonious and integrated fashion to meet the all round challenge at the modern technological era, with its hectic speed. The speciality of the yogic processes is that it facilitates the spiritual progress of man.

Methodology :

The subjects were assigned at random into two groups of sixty male each (m=30) age group between 18 to 20 years from R.D. Patil Pre-University College, Sindagi. Group I underwent yogic practices and Group II acted as control groups, who did not participate in any training during the training period other than their daily schedule in the curriculum.

The training program was scheduled for one session in the morning between 6:30 am to 7:30 am for five sessions in a week and the same was continued for 12 weeks. The training program schedule was 15 minutes – warming up and stretching, 10 minutes – Pranayama, 25 minutes – Asanas, 10 minutes – Relaxation.

Yogic practice include Asanas : Padmasana, Yoga Mudra, Pachimottanasana Sarvangasana, Halasana, Dhanurasana Bhujangasana, Salabasana, Vakrasana, and Shavasana. Pranayama : Nadi Suddi, Surya Bhedana, Anuloma Viloma.

After every 2 weeks the duration of the training program was gradually increased and also the number of repetitions. As per the available literatures, the following standardized tests were used to collect relevant data on the selected variable and they were presented in the Table. 1.

Table 1: Test item

S.No.	Criterion Variable	Test item	Unit of Measurement
1	Cardio vascular endurance	1 mile run / walk	Minutes and seconds

Table 2 : Cardiovascular Endurance Test Analysis

Group	Number	Mean \pm SD		t-value
		Pre Test	Post Test	
Experimental Group	30	12.18 \pm 2.33	8.62 \pm 2.15	3.69*
Control Group	30	12.16 \pm 3.16	12.17 \pm 3.19	0.08

* Significant of .05 level $t_{.05(29)} = 2.045$. (Cardiovascular endurance scores in meters)

The table 2 shows that, the obtained t-ratio between the pre and post test means of experimental and control group are 3.69 and 0.08 respectively. The table values required for significant difference with df 29 at .05 level is 2.045. Since, the obtained 't' ratio value of experimental group on cardiovascular endurance is greater than the table value 2.045, it is concluded that the yogic training had significantly improved the cardiovascular endurance of experimental group.

Table 3 : Analysis of Variance of Cardiovascular Endurance

Adjusted post test mean		Source of variance	Sum of squares	df	Mean squares	'F' – Ratio
Experimental group	Control group					
10.10	10.69	Between	3.919	1	3.919	12.23*
		Within	18.257	57	0.320	

* Significant at 0.05 level. (The table value required for significance at .05 level with df 1 and 57 is 4.01)

Table 3 showed that the adjusted post test mean values on cardiovascular endurance of experimental and control groups are 10.10 and 10.69 respectively. The obtained F-ratio of 12.23 for adjusted post test mean is greater than the table value of 4.01 with df 1 and 57 required for significance at .05 level of confidence. The results of the study indicate that there was significant mean difference exist between the adjusted pre test and post test means of experimental group on cardiovascular endurance.

Conclusion :

From the analysis of the data, the following conclusions were drawn.

Experimental group had achieved significant improvement on cardio vascular endurance.

Significant difference were found between experimental and control groups towards improving the selected variable cardio vascular endurance.

In the present study, it was concluded that cardio vascular endurance were improved by yogic training. Hence, it is recommended to the coaches, trainers and physical educators to adopt these findings to improve cardiovascular endurance for their athletes.

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Resilience and Achievement Motivation among Football Players of University

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Abstract

Motivation is the reason for the actions undertaken by people and the underlying concept is a driving force that helps a person achieve a specific goal (Osabiya, 2015). Achievement motivation the behaviours of an individual who strive to accomplish something and so his best to excel his performance (Khan & Rizwanuddin, 2015). Resilience is the ability of a person to bounce back after facing a challenging situation. Achievement motivation and resilience are studied in various situations, however, they are hardly studied together in the field of sports, and hence the present study was conducted to assess the relationship between achievement motivation and resilience among football players in a University. 50 students, aged 17 to 23, who were playing football for a minimum of three months, from Central University of Karnataka were selected using the purposive sampling method. Achievement motivation inventory (Muthee & Immanuel 2009) and the adult resilience inventory (Michael, 2016) were used to collect the data. Descriptive statistics and Pearson's product moment was used for statistical analysis. The results of the present study shows that there is no significant relationship between resilience (M=107.5, SD 9.06) and achievement motivation (M=113.58, SD=13.15) among university football players ($r=0.096$). Key words Achievement Motivation, Football Players Resilience

Introduction

Motivation is the reason for people's action, desires and needs. It is the cause for an individual to design one's own behaviour. The underlying concept of motivation is a driving force within individuals which helps them to achieve specific goal in order to fulfil some need or expectation (Osabiya, 2015). Motivation encourages a person to either repeat or stop a particular kind of behaviour. Motivation is made up of beliefs, perceptions, values, interests, and actions (Lai, 2011). A motive is the reason for the individual to have a particular aim or have an inclination to a particular behaviour. Motivation can be seen as a cycle in which thoughts influence behaviours, behaviours increases performance, performance affects thoughts, and the cycle continues.

Motivation is the driving force behind a person's actions. It acts as an important foundation to complete cognitive behavioural tasks such as planning, organization, decision-making, learning, and assessments (Singh, 2011). One type of motivation we can find in our surroundings is Achievement motivation. According to Atkinson and Feather, "The achievement motive is conceived as latest disposition, which manifested in overt striving only when the individual perceives performance as instrumental to a series of personal accomplishment" (Khan & Rizwanuddin, 2015). Achievement motivation is understood as behaviours dedicated to developing and demonstrating higher abilities. It refers to the behaviour of an individual who strive to accomplish something and so his best to excel his performance (Khan & Rizwanuddin, 2015).

Achievement motivation is an individual's urge to achieve something in their life. It is the driving force which makes an individual feel like attaining some situations or achieve something in turn give satisfaction. It is a broader theme that focuses on how specific situations influence their desires, emotions and behaviours. Those who are motivated by achievement tend to plan their activities well because their activities are aimed at a particular target and they want to achieve it at any cost. Their plan will be accurate and well designed. A person motivated by achievement would probably choose something of moderate difficulty because it will help them to attain the aim at a reduced risk level.

Although achievement is relatively a new concept in the world of motivation, it is now widely used in the area of education (Dr. Dhanya. N & Anitha. T. A, 2013). Various studies have been conducted to discover what motivates students. With these studies came ideas on how to predict an individual's task performance (Atkinson and Feather, 1966; Grabe, 1979; Mukherjee, 1964). One theory of Achievement Motivation was proposed by Atkinson and Feather (1966). They stated that a person's achievement oriented behaviour is based on three parts: the first part being the individual's predisposition to achievement, the second part being the probability of success, and third, the individual's perception of value of the task. Atkinson and Feather (1966) state, "The strength of motivation to perform some act is assumed to be a multiplicative function of the strength of the motive, the expectancy (subjective probability) that the act will have as a consequence the attainment of an incentive, and the value of the incentive.

Resilience has been understood as the capacity of individuals, families and communities to cope successfully with everyday challenges including life transitions, times of cumulative stress and significant adversity or risk (Wong et al., 2009). Resilience is the capacity to adapt to changing conditions and to maintain or regain functionality and vitality in the phase of stress or disturbance. It is the capacity to bounce back after a disturbance or interruption. Resilience involves behaviours, thoughts and actions that people can learn and develop and mainly acts in people who are flexible to different kind of situations.

Garnezy's (1991) triadic model of resilience provided a widely accepted ecological framework for understanding the resilience process. Multiple scholars use this framework to study resilience (Gordon & Song, 1994; Morales & Trotman, 2004; Werner & Smith, 1982). The triadic model described the dynamic interactions among risk and protective factors on three levels (individual, family, and environmental). The model also emphasized that resilience is a process that empowers individuals to shape their environment and to be shaped by it in turn. Similarly, Cicchetti and Lynch's (1993) interactive ecological-transactional model of development highlighted how certain contexts (e.g. culture, neighbourhood, family) interact with each other over time to shape development and adaptation. These ecological models highlight the intersection of varying influences upon one's development and how risk and protective factors can interact to enhance or inhibit a person's resilience.

Resilient people are able to adapt to stress, crises and trauma. They find ways to bounce back from the ups and downs of life and move forward. Some people are born with a strong sense of resilience. Others may need to learn skills and develop resilience. Resilience does not mean being tough to situations or reacting to every setback with a smile. Resilient people also get sad, angry or frustrated when faced with a setback. But they find ways to move forward to tackle challenges with creativity, hope and a positive attitude.

In the present society people often get hooked up with problems and are frustrated. They get stuck at their problems and are struggling to solve them. This eventually disturbs their achievement motivation and questions the reason of existence. Without achievement motivation and resilience, the life of an individual is worth nothing. One should have a minimum level of achievement motivation and resilience for his/her survival. While there are various studies in the field of achievement motivation and resilience that are conducted together, little is known about the relationship between achievement motivation and resilience in the field of sports as there are hardly any studies conducted. The present study is conducted to assess the relationship between achievement motivation and resilience. Establishing the relationship between achievement motivation and resilience can help provide orientation to sports persons. Specific orientation in Achievement motivation and Resilience will help the players to improve their skills and performance.

The present study is conducted to assess the relationship between achievement motivation and resilience among football players. While achievement motivation and resilience are studied in relation to sports persons, there are hardly any studies that link both achievement motivation and resilience among sports players. The understanding of the relevance of achievement motivation and resilience is highly limited among sports persons, hence bringing in a need to study these together. Therefore, the present study is conducted to assess the relationship between achievement motivation and resilience among the football players of a University

Methods

Research Design

The present cross sectional quantitative study has adopted descriptive research design with independent variable being resilience and dependent variable being achievement motivation.

Population and sampling procedure

The population of the study were active football players of Central University of Karnataka. Purposive sampling method was used. 50 active football players were selected using purposive sampling method. The inclusion criteria of the study was active football players from any department between the ages 17 to 23 years. The criteria for selecting the participants was that football players should be skilled in the game and should have been playing football for at least 3-months.

Tools for data collection

The following tools were used for the study:

Achievement motivation inventory: Achievement Motivation Inventory developed by Muthee & Immanuel (2009). The instrument has 32 items the responses to the items are marked at a 5-point scale. Scoring was done by summing all the items to produce a total score. Higher score indicates high achievement motivation and lower score indicates low achievement motivation.

The Adult Resilience Measure: The Adult Resilience Measure developed by Michael (2016), The scale has 28 items; the responses to the items are marked at a 5-point scale. Scoring was done by summing all the items to produce a total score. Higher score indicate. High score indicates as having a more resilient personality and vice versa.

Data collection procedure

Participants were approached and consent was taken to conduct the study. Confidentiality was established after which questionnaires were distributed and data was collected. After the completion of the interviews data was entered and scoring and interpretation was done.

Data analysis

The present study used descriptive statistics and Pearson's product moment correlation to analyse the results. The Statistical Package for Social Sciences (SPSS), version 20 was used.

Results

The results of the study are given below.

Table 1 showing demographic information of the participants

Demographic variable	Category	Frequency	%
Age group	17-20 years	37	74
	20-23 years	13	26
Gender	Male	50	100
	Female	0	0
Religion	Hindu	23	46
	Islam	12	24
	Christianity	15	30

Table 1 shows the demographic information of the study participants, from the table it was observed that most of the participants belongs to the age group of 17-20 years 74%, most of the participants were male students 100% and belongs to Hindu religion 46%.

Table 2 showing the Mean and SD of the resilience and achievement motivation

Variables	M	SD
Resilience	107.12	9.06
Achievement motivation	113.58	13.15

Table 2 shows the Mean and SD of the resilience and achievement motivation. The mean and standard deviation of the resilience is (M=107.5, SD 9.06) achievement motivation is (M=113.58, SD=13.15).

Table 3 showing the relationship between resilience and achievement motivation

Variable	Achievement motivation (r)
Resilience	0.096

Table 3 shows relationship between resilience and achievement motivation from the results it was observed that there is no relationship between resilience and achievement motivation (r=0.96).

Discussion

Achievement motivation is understood as the behaviour of an individual who strives to accomplish something and so his best to excel his performance. Resilience is the capacity to adapt to changing conditions and to maintain or regain functionality and vitality in the phase of stress or disturbance. While achievement motivation and resilience has been studied together, the understanding of the relevance of achievement motivation and resilience is highly limited among sports persons at college/university level. There are hardly any studies conducted with the two factors together among sports players. Various studies conducted based on the relationship between Achievement motivation and sports participation which show achievement motivation is mainly related to self-efficacy. The present study is aimed at understanding the relationship between achievement motivation and resilience among the football players of a University. The results of the present study shows that there is no significant relationship between resilience and achievement motivation (r=0.96). the results of this study is in contrast with a study conducted by Arora (2012), who, in her study on achievement motivation and resilience among athletes has found that differences existed among athletes and non-athletes in terms of achievement motivation and resilience. A positive linear relationship existed between achievement thoughts, behaviour and resilience.

Conclusion

Achievement motivation drives a person to perform well and achieve a goal set by him/her. The individual is motivated to perform the best to achieve the goal. Resilience is the ability of a person to face and bounce back from any situation. The present study was conducted to assess the relationship between resilience and achievement motivation. Pearson's product moment correlation was used for statistical analysis. The results showed that there is no significant relationship between resilience and achievement motivation.

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Influence of Self Concept on Inter University Football Players

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Abstract :

The present investigation has been concerned with the study of self concept among national, inter university players. 100 inter university football players in a age range of 19 to 22 years belonging to different sex and cultures were administered self concept scale developed by Beena Awasthi. Results indicate that sex and culture variable were found statically significant factor, affecting various dimensions of self concept.

Introduction :

There are several theoretical view points about self Mr. Cooley (1902) defined the self as, that which is designated in common speech by the pronouns of first person singular I, 'Me', 'my' 'mine' and 'myself'. He noted that what is labeled as self produces stronger emotions than what is labeled feelings that the self can be identified. Mr. Cooley's concept of looking glass self. He noted that the self arises in social interaction at an outgrowth of the individual's concern about how others react to him. In order to anticipate other people's reaction so that he can behave accordingly, the individual learns to perceive the world as they do. Mead believes that there are so many selves as there are social roles.

Mr. Allport (1937) believes that the structure and the dynamics of personality are same. All the self or ego functions be called as appropriate functions or personality. Mr. Allport identified seven aspects in the development of the appropriate or selfhood. They are bodily sense, self identify, ego enhancement, ego-extension, rational process, self image and appropriate striving. These seven aspects, rational thinking, cognitive style, and the function of knowledge are all true and vital portions of personality, and they have in common a phenomenal warmth and a sense of importance. Together, they might be said to comprise the "proprium".

A systematic theory of self was proposed by Mr. Rogers (1951). He defined the self, "as an organized fluid, but consistent conceptual pattern of perception of characteristics and relationships of the "I" or the "me" together with values attached to those concepts. He said that the self concept includes only those characteristics of an individual that he is aware of and over which he believes exercise control. Or perhaps the high visibility of athletes accounts for their value to their peers. Talented athletes naturally enjoy demonstrating their abilities.

Research has also shown that students who are skilled in athletics are often academically skilled as well (Day et.al., 1994) Researchers have speculated on the relationship of physical competence to academic skill. Many students with academic difficulties have been placed in perceptual motor program designed to improve their academic performance. The relationship between mental and physical competence may be indirect. Improving his or her physical skills may improve the student's self concept. When we feel good about ourselves, we are perhaps apt to study more efficiently and to learn more thoroughly. In other words, the physical program contributes to the development of a favorable self concept.

Those in charge of administering athletic and physical educational programs should try to make the sport experience a positive one. Athletic programs can and should make beneficial contributions to the self concepts of the participants. As we noted earlier, students should not be placed in an environment that is either psychologically or physiologically inappropriate. A student who is not psychologically prepared for the success and the failure that are both a part of sport within benefit from the athletic experience. Competition can only be harmful to the self concept of students who fail because they are not physically ready to participate in sport:

Coaches can avoid such problems by remembering that each child follows his or her own pattern of mental and physical development; this must be taken into account when sport programs are designed. Keeping in view the above facts the present investigator aims to measure self concept as personality trait and relate it with inter university football players. The problem is to measure the different dimensions of self concept among players. The hypothesis which was put to test was.

Method :

The sample of the present study consisted of 100 interuniversity football players in the age range of 19 – 22 years belonging to different sex and cultures. They were administered self concept scale developed by Beena Awasthi following semantic differential techniques.

Result :

The mean value obtained on different dimensions of self concept were presented in Table 1. To ascertain the differences between these groups, was calculated by finding out the F-ratio.

Table – 1
F ratios and their significance level

Factors	Values	AB	AB	AB	AB	Summary of F- Value Source F-value level
Physical self concept	M	10.40	32.20	31.12	33.52	Sex 5.83 8.5 Area of Resi 24.72 01 AxB 0.50 N.S
	SD	1.46	3.79	3.33	4.16	
Intellectual Self concept	M	29.72	31.00	28.96	29.60	Sex 10.51 .01 Area of Resi 8.31 01 AxB 0.92 NS
	SD	3.14	3.12	2.63	2.75	
Social self concept	M	28.44	29.32	29.28	30.68	Sex 5.85 .05 Area of Resi 6.28.05 AxB 32 NS
	SD	4.08	4.29	3.71	3.85	
Moral self concept	M	30.52	29.60	32.20	31.32	Sex 39.84 .01 Area of Resi 11.61.01 AxB 005 NS
	SD	2.80	2.43	2.23	1.50	
Emotional self concept	M	26.72	24.72	30.36	28.12	Sex 98.54 .01 Area of Resi 35.74.01 AxB 171.46.01 NS
	SD	3.83	2.66	2.37	3.36	
Aesthetic self concept	M	22.48	23.96	25.64	28.36	Sex 171.46.01 Area of Resi 32.92.01 AxB 4.61 NS
	SD	2.81	2.40	2.02	2.81	

A1 = Male A2 = Female B1 = Rural B2 = Urban

It seems reasonable to infer from Table 1 that inter university football players belonging to different cultures (Area of residence) and sex have obtained significantly different mean scores on different dimensions of self concept. With a view to see whether these characteristics of data given in Table 1 are statistically significant data were subject to two way analysis of variance. Obtained F ratios for sex and culture variables in all the case dimensions of self concept) were found significant at respectable level of significant. The present confirms the hypotheses.

On the basis of obtained results, it may be concluded that self concept and personality inseparable. Self concept influence the development of personality to a greater extent. The present study has special importance in sports psychology because it is designed to examine personality of inter university football players. Obtained empirical findings will definitely bridge the gap observed in research studies on self concept of inter university football players. The data of the present experiment support the findings of Klein, Loftus and Burton (1989). Van Hook and Higinis (1988) Rentsch & Heffner (1994) Day et.al., (1944).

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“A Study On Health & Fitness On Women’s Through Super Women Programme”

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Abstract:

The realm of fitness, good health and wellness is a vast one today. we can see that people are getting serious about their fitness goals. Since the pace of day to day living has increased manifold, as has our responsibilities and activities, it is imperative that the importance of women’s fitness is made well known. Although, young women are becoming a lot more health -conscious today, there are still some women especially the older generation, who forgo their own health for the sake of their families. While it may seem worthwhile in the short run to only spend your responsibilities, energy and care- giving tendencies for your family and kids, it is so important for women to look after themselves. Being fit does not only mean trying to achieve a size zero body, but more importantly reach that level of optimum health that will allow you to function to the best of your abilities. The path toward fitness for women encompasses a wide range of benefits that will enhance your life, physically, mentally and emotionally as well. The main aim of the study is to achieve overall wellness of the women through super women programme, which includes general fitness, yoga & Zumba, which will work as each day different workout for the whole week, which will keep the women motivated for the general fitness. The results are after applying the supper women programme on the basis of pre-test and post-test, the study shows that the programme works well with women fitness and overall wellness of a women can be achieved.

Introduction:

Now-a-days in India women’s fitness & health has taken a toll and women are bearing a grim consequence for not taking their health issues seriously & in some conditions they even go unchecked throughout their life. Now this situation has triggered some dire repercussions on women’s health & physical fitness which need to be resolved. However, in India after its inception as a Republic in 1950, women have always bared a brunt of those social norms & societal pressures which marks women inferior to men and tugged on them with the chain of taboo connecting with patriarchal shackles which created a nexus between both genders. Women’s health and fitness issues had always been on toss whether it was on social backwardness front or on malnutrition. These issues have been imperative and multifaceted in nature which needs a dire attention that has to be keenly addressed and approached in a rationale & pragmatic manner by making women play more prominent role in various aspects of physical fitness & health, rather than in haste. So, a careful analysis of growth & development in physical fitness through a proper mechanism and techniques for women’s in India is the need of the hour. Currently, women in India face a multitude of health problems, which ultimately affect the aggregate economy’s output. Addressing the gender, class or ethnic disparities that exist in healthcare and improving the health outcomes can contribute to economic gain through the creation of quality human capital and increased levels of savings and investment.

Statement of the Problem:

The purpose of this study is to determine the physical fitness standards in women belonging to age group of 25-45 years through “**Super Women Program**” conducted at **Wow Fitness Studio** located at Miyapur, which is India’s first concept women’s fitness.

Hypothesis:

It is hypothesized that the Overall women’s health and physical fitness can be achieved significantly through Super Woman Programme when administered properly. It is hypothesized that there might be a correlation between the Overall Fitness of the women’s and the Super Woman Programme.

“Super Women Programme”

To tackle/solve the above-mentioned problems related to general fitness, there is a 6day program conducted on women’s known as superwomen program. In this program, everyday different workouts are designed for the various health issues as given below:

1. Cardiovascular fitness (Monday)
2. Flexibility & agility (Tuesday)
3. Yoga (Wednesday)
4. Circuit training (Thursday)
5. Aerobics & Zumba (Friday)
6. Recreative fitness (Saturday)

The programme consist of different workouts and Before starting any of the above workouts, warming up of the body will be done with pre-cardio stretches & after the workout is done warming down is important to the body with post cardio stretches.

Cardiovascular fitness includes the walking, jogging, running, it is an aerobic activity, it is done to improve the cardiac and endurance levels of the women respectively. Flexibility & agility includes the active and passive stretches to the body, basically it increases the range of motion to the joints & muscles. It also includes body strengthening & toning exercises and drills. Agility is the ability of the individual to change position in space and on ground. Which include the drills as well. Yoga cultivates health and wellbeing (physical, emotional, mental and social) through the regular practice of a range of many different techniques, including postures and movement, breath awareness and breathing exercises, relaxation and concentration, self-inquiry and meditation.

Circuit Training: - Circuit training is a form of body conditioning or resistance training using high-intensity aerobics. It targets strength building or muscular endurance. An exercise "circuit" is one completion of all prescribed exercises in the program. Which consists of upper body, core & trunk, lower body, total body exercises. Aerobics & Zumba Aerobics. The word aerobic means "with oxygen" but aerobics usually refers to any kind of activity that gets your heart pumping and your muscles using oxygen. Aerobic dancing involves any kind of exercise put to music and can include everything from country music line dance aerobics to hip-hop dancing. Were as Zumba ensures a total body workout in and fun and interactive manner. Zumba Fitness is a Latin-inspired cardio-dance workout that uses music and choreographed steps to form a fitness party atmosphere. Recreation is an activity of leisure, leisure being discretionary time. The "need to do something for recreation" is an essential element of human biology and psychology. Recreational activities are often done for enjoyment, amusement, or pleasure and are considered to be "fun".

Data Collection Procedure:

The sample of this study was to find out whether there is any significant difference in overall physical fitness of women after administering super women programme. So as to achieve this purpose the investigator has selected 20 random women under the age group of 25 to 35 years from wow fitness studio at Miyapur, Telangana. Before conducting the tests, the investigator in order to maximize the co-operation of the subjects in the study, briefed them about the nature of study, significance of the study & other various aspects related to the study. The testing techniques, warmup & warm down exercises, postures of yoga, aerobics & Zumba body toning and overall body workouts were meticulously explained and demonstrated with constant orientation and help was employed to the subjects throughout the investigation period of 3 months.

The whole test was categorized under 2 phases namely Pre-Test Study and Post-Test Study. A scoring system was adopted to test the performance of every individual subject in 2 phases of the test i.e., Pre-Test & Post-Test. In between the 2 phases the subjects were given physical & mental fitness training through Super Woman Programme continuously for 3 months. The Post-Test Study

was conducted after the subjects were trained for 3 months. In the Pre-Test Study the investigator administered the physical fitness test and Mental Fitness Test on these subjects to measure the overall fitness before commencing the Super Woman Programme. The physical fitness test and mental fitness test comprises of the components of the overall fitness for which every individual subject was tested and results were recorded according to their performance. The following General Fitness Components, Mental Health Fitness Components and Overall Fitness Components adopted for this test are shown below in the table.

General Fitness Components					Total Score
Agility	Endurance	Flexibility	Speed	Strength	
10 Points	10 Points	10 Points	10 Points	10 Points	50 Points

Mental Fitness Components					Total Score
High Confidence	Low Depression	High Self Esteem	Low Stress	Less Anxiety	
10 Points	10 Points	10 Points	10 Points	10 Points	50 Points

Overall Fitness Components		Total Overall Score
General Fitness	Mental Fitness	
50 Points	50 Points	100 Points

Results:

In the hypothesis-I, it was hypothesized that the Overall women's health and physical fitness can be achieved significantly through Super Woman Programme when administered properly. The scores of Pre-Test and Post-test of 20 samples were converted into Mean, Standard Deviation, Standard error, t-ratio and comparison was made for the overall fitness through the paired sample statistics. The scores of Pre-Test and Post-test of both groups were converted into Mean, Standard Deviation, Standard error, t-ratio and comparison was made and both groups were tested for significance. The computation of Mean, Standard Deviation, Standard error, t-value, degrees of freedom, corresponding p-value at 0.01 level of probability and significance (2-tailed) of Pre-test and Post-test are presented in the table as follows:

Paired Samples Statistics

OVERALL FITNESS								
S.No.	Tests Conducted	Mean	Std. Dev.	Std. Error	t-ratio	Degrees of freedom (df)	p-value @ 0.01	Sig.(2-tailed)
1.	PRE-TEST	58.6	4.27	0.954	-7.51	19	2.86	1.000
2.	POST-TEST	76.5	3.52	0.787				

t-ratio:

Independent Samples Statistics

OVERALL FITNESS					
S.No.	Tests Conducted	t-ratio	Degrees of freedom (df)	Corresponding p-value @ 0.01 probability level	Significance (2-tailed)
1.	PRE-TEST	-5.47	19	2.86	0.862

Independent Samples Statistics

OVERALL FITNESS					
S.No.	Tests Conducted	t-ratio	Degrees of freedom (df)	Corresponding p-value @ 0.01 probability level	Significance (2-tailed)
1.	POST-TEST	-7.04	19	2.86	0.001

The subjects were made to practice regressive Super Woman Programme for 3 months and final test was conducted. The data was statistically tested for identifying the difference existing among women's and korfbal players. So, from the above 1 table of Paired Sample Statistics and 2 tables of Independent Sample Statistics it is concluded that the tabulated value of mean and standard deviation in respect of various Components of Overall Fitness shows that there is much difference among women's in Pre-test and Post-test. The calculated t-value is compared with the table t-value at '19' degrees of freedom at 0.01 level of confidence, which was given by Clarke and Clarke. The value of t-ratios in the above 3 tables i.e., -7.51, -5.47 & -7.04 clearly denotes that it is way far ahead when compared to their corresponding p-value at 0.01 probability level i.e., 2.86. with the significance value of 1.000, 0.862, 0.001 respectively. It means that the tests (Pre-test & Post-test) conducted for concluding overall fitness of the women's through Super Woman Programme is completely significant and represents the Overall women's health and physical fitness can be achieved significantly through Super Woman Programme. Hence, the **Hypothesis-I** is accepted.

Correlation:

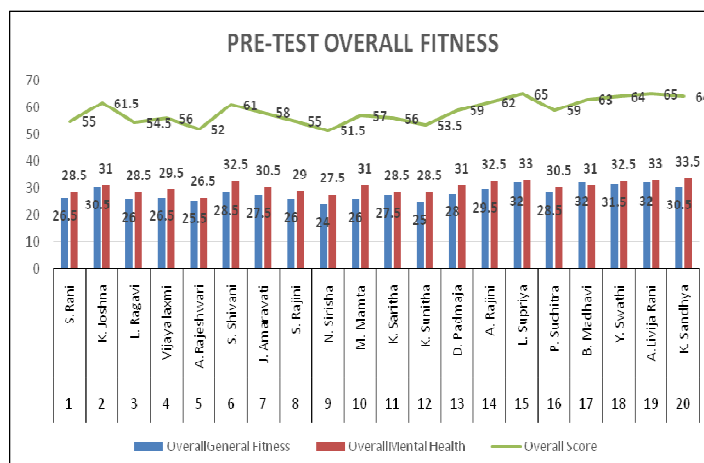
In the hypothesis-II it was stated that there might be a correlation between the Overall Fitness of the women's and the Super Woman Programme. So, After the Pre-Test and Post-Test, we can find out whether there is a correlation between overall fitness of the women's and the Super Woman Programme. For that purpose, if we consider the five least overall health scores of the samples in the Pre-Test and compare them with their overall health scores in the Post-Test, we can establish a fact that their overall health score in the Post-Test has increased rapidly. Hence, it reflects firm chances that a strong correlation co-exists between overall fitness and Super Woman Programme which can be concluded by using the Correlation formula on the overall fitness scores of Pre-Test and Post-test.

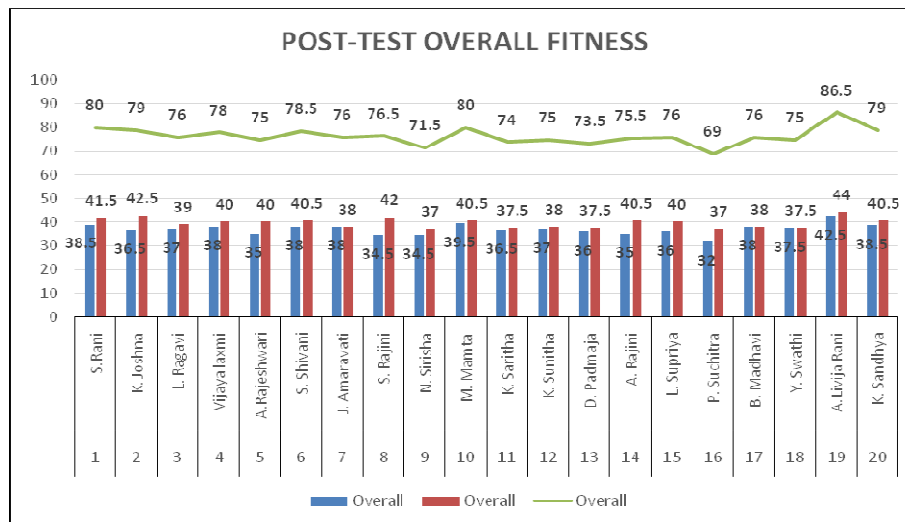
Correlation for the top 5 Least Scores in Pre-Test				
S.NO.	Name of the Subject	Pre-Test Scores	Post-Test Scores	Correlation
1.	N. Sirisha	51.5	71.5	0.842517387
2.	A. Rajeshwari	52	75	
3.	K. Sunitha	53.5	75	
4.	L.Ragavi	54.5	76	
5.	S. Rajini	55	76.5	

Correlation can have a value:

- 1 is a Perfect Positive Correlation.
- 0 is no Correlation (the value doesn't seem linked at all)
- -1 is a Perfect Negative Correlation.

The correlation value of 0.8425 shows that, it is near to the Perfect Positive Correlation. In other words, it means that the Overall Fitness of women's in the Pre-Test is directly correlated to the Super Woman Programme after the Post-Test by 84.25%. The correlation value of 0.8425 shows how good the correlation is (not how steep the line is), and if it is positive or negative. The above correlation value measures the strength of linear relationship and when two sets of data are strongly linked together we say they have a high correlation. Hence, the **Hypothesis-II** is accepted.





Conclusion:

The results from the study are very encouraging and demonstrate the following benefits: The study shows that the women’s health & physical fitness can show terrific results in conquering the health issues & concerns. It is seen that the seeds of physical fitness in women sprouted to life once they were guided properly through awareness programmes & various sessions. The women were more satisfied with the results when compared to pre-test & post-test. There was an improvement in the stamina, strengthening of the joints & organs, toning of the body, activeness in the body and mental peace was gained. So many people spend their health gaining wealth, and then have to spend their wealth to regain their health. So, every individual should never neglect their health & consider it seriously. The super women programme has met the needs of the women who were facing a lot of health problems and concerns. Regular physical activity is needed for every individual not only women, which will help everyone to be healthy, wealthy and wise. The research has revealed a simple strategy that you can achieve your Physical & Mental Fitness goals through superwomen programme.

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“Effect of Yogasanas on Selected Health Related Physical Fitness and Physiological Variables of High School Kho-Kho Players”

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Introduction

Yoga is India's unique contribution to Physical Education activities. Yoga is a scientific and systematic discipline of the internal human body with a view to cosmic reality of God. It is the ancient traditional Psycho-Physical culture that creates to the health of a human – being.

MEANING OF YOGA

The word yoga means 'unity' or 'oneness' and is derived from the Sanskrit word 'yujir' and 'yuj' which means 'to join'. This type of effort is possible only through the control over sense organs and through continued practice. "The withdrawal of the sense organs from the worldly objects and their control of yoga". "Yoga is a timeless practice since thousands of years dealing with physical, mental and spiritual wellbeing or human society as whole".

OBJECTIVES OF THE STUDY

In view of the yoga practice in present day life style the present study was carried out with the following objectives. The objectives of the present study was to find out the Health Related Physical Fitness and Physiological responses to various packages of Yogasanas among high school Kho – Kho Players.

The objective of the study was to determine the influence of Yogasanas on selected physical and physiological variables of Kho – Kho Players.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out where there is any significant improvement on the efficiency of the Health Related Physical and Physiological variables through selected Yogasanas among high school Kho-Kho players.

HYPOTHESIS

The hypothesis formulated in the present study is as follows.

It was hypothesized that the experimental group would have significant difference than the control group in the selected health related physical fitness variables respond to yogasanas among high school Kho-Kho players. It was hypothesized that the experimental group would have significant difference than the control group in the selected physiological variables responds to yogasanas among high school Kho-Kho players.

DELIMITATIONS

The subjects were selected randomly from Govt. High School, Atmakur, Nellore District, Andhra Pradesh. The study was delimited to the age group of the boys students were ranged between 13 to 15 years. The study was conducted on thirty Kho-Kho players only each group was restricted 15 Subjects. The Yogasanas program me was restricted to period of 12 weeks. The following Health Related Physical Fitness and Physiological Variables only were Selected.

PHYSICAL FITNESS VARIABLES

Muscular Endurance , Cardio Respiratory Endurance and Flexibility

PHYSIOLOGICAL VARIABLES

Blood Pressure , Systolic blood Pressure, Diastolic blood Pressure

Resting Pulse Rate Resting Respiratory Rate

Methodology

The purpose of this study was to find out effect of 12 weeks Yogasanas on selected health related physical fitness and physiological variables of high school Kho – Kho players. To achieve these purpose 30 students were selected of random from Govt High School, Atmakur, Nellore District of A.P. They were in the age group of 13 to 15 Years. Each subject was oriented in the procedure to the administration of test. They participated in their research voluntarily and cheerfully without any compulsion.

Selection Of Variables

The subjects were formed as random group design consisting of experimental group and the control group of fifteen (15) each. The control group was not permitted to Participate in the Experimental Training Programme. The Experimental group 15 was allowed to take part in the regular programme. The subjects were informed about the purpose of this study in order to secure their full Co–Operation. All the Subjects were tested for experimentations of muscular endurance, cardio respiratory endurance, Flexibility, Systolic blood Pressure, Diastolic blood Pressure, Resting Plus rate, Resting Respiratory rate.

Statistical Technique

The following statistical technique was adapted. The analysis of covariance was applied in order to list the difference in mean gains for significances. In the analysis of covariance, the final means were adjusted for difference in initial means and the adjusted means were tested for significance. Analysis of variance was first computed to find the differences between initial means where 'F'-ratio was used. The data collected from the two groups on the selected variables were statistically examined to find out whether there was any significant difference or not between the adjusted means by analysis of covariance method. The level of significance was set at 0.05 level of confidence.

Conclusions

Within the limitations improved by the experimental conditions, the following conclusions were drawn.

It was concluded from the results of the study that the yogic practices group showed significant improvement on Muscular endurance among high school Kho-Kho players compared to the control group. It was concluded that 12 weeks of yogic practices group had greater improvement on cardio respiratory endurance among high school Kho-Kho players compared to the control group.

It was concluded that 12 weeks of yogic practices group showed tremendous improvement on flexibility among high school Kho-Kho players compared to the control group. It was concluded from the results of the study that the yogic practices group showed no significant difference on systolic blood pressure among high school Kho-Kho players compared to the control group.

It was concluded from the results of the study that the yogic practices group showed no significant difference on diastolic blood pressure among high school Kho-Kho players compared to the control group. It was concluded that 12 weeks of yogic practices group showed significant effect on resting pulse rate among high school Kho-Kho players compared to the control group.

It was concluded that 12 weeks of yogic practices group showed significant improvement on resting respiratory rate among high school Kho-Kho players compared to the control group.

How effect Blood doping to sports and games

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Introduction:

Doping is the word, which is used in the field of sports, when athletes use prohibited substance or method to unfairly improve their sporting performance. In general terms, doping is the use of performance enhancing substances or methods by athletes to gain an advantage over their competitors. There are five classes of banned drugs, the most common of which are stimulants and hormones. There are health risks involved in taking them and they are banned by sports' governing bodies. In fact it is very clear that doing is not only using a prohibited substance or method to enhance the sports performance but to break any one or more anti-doping rules is also included under doping. Hence, it can be concluded that doping refers to the use to performance – enhancing substance or method that is not approved by the law or violates the world anti-doping agency (WADA).

Types of doping: Doping can classified into the following to types:

Performance enhancing substances

Physical methods

Performance enhancing substances:

Stimulants, Anabolic steroids, Peptide Hormones, Beta-2-Agonists, Narcotics

Diuretics, Glucocorticosteroids

Physical Methods:

Blood doping and Gene doping

Blood Doping: Blood doping is an illicit method of improving athletic performance by artificially boosting the blood's ability to bring more oxygen to muscles. In many cases, blood doping increase the amount of hemoglobin in the bloodstream. Hemoglobin is an oxygen-carrying protein in the blood. So increasing hemoglobin allows higher amounts of oxygen to reach and fuel an athlete's muscles. This can improve stamina and performance, particularly in long-distance events, such as running and cycling. Blood doping is banned by the international Olympic committee and other sports organization.

Types of Blood Doping:

The three widely used types of blood doping

Blood transfusion

Injections of erythropoietin (EPO)

Injections of synthetic oxygen carriers

Blood transfusion: in normal medical practice, patients may undergo blood transfusion to replace blood lost due to injury or surgery. Transfusions also are given to patients who suffer from low red blood cell counts caused by anemia, kidney failure, and other conditions or treatments.

Autologous transfusion: This involves a transfusion of the athlete's own blood, which is drawn and then stored for future use. **Homologous transfusion:** In this type of transfusion, athletes use the blood of someone else with the same blood type. **EPO injections:** EPO is a hormone produced by the kidney. It regulates the body's production of red blood cells. In medical practice, EPO injections are given to stimulate the production of red blood cells for example, a synthetic EPO can be used to treat patients with anemia

related to chronic or end-stage kidney disease. Athlete using EPO do so to encourage their bodies to produce higher than normal amounts of red blood cells to enhance performance.

Synthetic oxygen carriers: These are chemical that have the ability to carry oxygen.

HBOCs (hemoglobin-based oxygen carriers)PFCs (perfluorocabons)

Synthetic oxygen carriers have a legitimate medical use as emergency therapy. It is used when a patient needs a blood transfusion

Human blood is not availablehere is a high risk of blood infection

There isn't enough to find the proper match of blood type

Athletes use synthetic oxygen carriers to achieve the same performance enhancing effects of other types of blood doping increased oxygen in the blood that help fuel muscles..

Blood Testing: Blood testing is used in the detection of drugs such as EPO and artificial oxygen carriers by testing the haematocrit or blood count. Over time a "blood profile" of an athlete can be built up to help determine average readings for each individual. This can help with blood doping tests in the future. The same anonymity and representative procedures apply as for urine sampling. Again the athlete is asked to select and check the testing and collection equipment before a phlebotomist (an individual trained to draw blood) collects two samples of blood directly into bottles A and B. The bottles stay in the possession of the athlete (who is always accompanied by an official) until they are sealed in the sample collection kit. Samples are sent to a lab for testing. The same procedure applies as in urine testing, where if the A sample is positive, the B sample is then tested. Another positive result means the appropriate governing bodies are notified

Risks of Blood doping: By increasing the number of red blood cells, blood doping causes the blood to thicken. This thickening forces the heart to work harder than normal to pump blood throughout the body.

Blood doping raises the risk of :

Blood clot Heart attack Stoke

An estimated 20 European cyclists are believed to have died as a result of blood doping over the past 25 years.

.Blood doping via transfusion carries additional risk. Tainted blood can spread infectious diseases such as:HIV,Hepatitis B & C

Over time, repeated blood transfusion can cause a dangerous buildup of iron in the body. Improperly stored blood and improperly administered transfusion can cause acute lung injury and bacterial infection.

The risks of EPO injections include:

hyperkalemia (potentially dangerous elevation of plasma potassium levels in the body)high blood pressure,mild flu like symptomsAthlete who use synthetic oxygen carriers have an increased risk of: Heart disease Stroke

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Ethical Decision Making Challenge For Sports Managers And Ethical Issues In Sports Management

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Abstract

Management “both starts with a decision and ends with a decision”.“Managers decide during the process of fulfilling their responsibilities and tasks with the intention of being successful. While they are awarded for their prosperous decisions, they may be criticized for the unprosperous ones. In an effective management, deciding on a sustainable success is a most important criterion” . Through all these managerial responsibilities, the ability to manage and lead can only be developed via effective decision making as the decisions form the basis of the acts. The business of sport has not been immune or isolated from ethical problems, as sport managers are faced with ethical decision making each day they are on the job, they need to be well equipped with good ethical decision making models and education of ethical issues in sports management. Keywordsethical decision making, sports managers, ethical issues, sports ethics, decision making model, sports management.

Introduction

It goes without saying that decision-making is an essential component of sports and its management. Making the correct choice can be the deciding factor in earning a win or a loss, and sometimes these decisions have even larger implications beyond just one game. A team will have all the tools needed to ensure that they are always making the right choices when they have a person qualified to act as a sports manager with them.

The Importance of Ethical Decision Making Ethical decision-making is the key to having a long and successful career. Although it’s important to know how to handle yourself in the midst of a scandal, it’s even more important to learn how to make the correct decisions so you never end up in such a situation in the first place.

Sport managers are responsible for addressing ethical questions such as those pertaining to professionalism, equity, legal management, personnel issues, team ownership, responsibilities of professional team franchises, and the social justice associated with all levels of sport.

The sport industry is an extremely diverse industry, including segments such as professional sport, intercollegiate athletics, health and fitness, recreational sport and facility management. The industry is currently experiencing rapid growth and development, and as it grows, sport managers in the different segments encounter ethical issues which are often unique to each segment. This article discusses the various ethical issues facing managers in each of the segments. The purpose of this article is to focus on this expanding international industry, and to point out ethical issues confronting managers working in the sport industry, people commonly referred to as sport managers and also emphasises on the need to have an exclusive sport management oriented ethical decision making process structure.

Discussion And Conclusion

What is sport management and who are sport managers?

The concept of sport management contains two distinct elements – sport and management. Mullin (1980) defined sport management as including the functions of general management like planning, organizing, leading, evaluating along with decision making within the context of an organization with the primary objective of providing sport- or fitness-related activities, products, and/or services. The persons who carry out these functions of management are referred to as Sports managers. Organizations which provide the sport- or fitness- related activities, products or services make up the sport industry.

What actually constitutes the sport industry? In reality, the “sport industry” encompasses a wide variety of sport- or fitness-related activities, products, and/or services, and is traditionally broken down into several major industry segments. The major segments of the industry traditionally include professional sport, intercollegiate athletics, recreational sport, health and fitness club management and facility management

Ethical decision-making refers to the process of evaluating and choosing among alternatives in a manner consistent with ethical principles. In making ethical decisions, it is necessary to perceive and eliminate unethical options and select the best ethical alternative.

The process of making ethical decisions requires:

Commitment: The desire to do the right thing regardless of the cost

Consciousness: The awareness to act consistently and apply moral convictions to daily behaviour

Competency: The ability to collect and evaluate information, develop alternatives, and foresee potential consequences and risks

Good decisions are both ethical and effective:

Ethical decisions generate and sustain trust; demonstrate respect, responsibility, fairness and caring; and are consistent with good citizenship. These behaviours provide a foundation for making better decisions by setting the ground rules for our behaviour.

Effective decisions are effective if they accomplish what we want accomplished and if they advance our purposes. A choice that produces unintended and undesirable results is ineffective. The key to making effective decisions is to think about choices in terms of their ability to accomplish our most important goals. This means we have to understand the difference between immediate and short-term goals and longer-range goals.

Sports ethics is concerned with what is the right thing to do in sports and so the various decisions that need to be taken by the manager have to be ethically correct taking into consideration all the aspects of sports industry

As illustrated above, the sport industry is a broadly defined industry encompassing a number of diverse segments. Managers in each of these segments, professional sport, intercollegiate sport, the health and fitness industry, recreational sport and facility management, are challenged daily by the changes occurring in the industry as it grows and matures. Along with growth comes an increasing number of complicated ethical questions, many of which are unique to given segments of the industry. Sport managers need to stay current with the ethical issues they may confront, so they will be proactive in their approaches rather than reactive.

Sport managers, therefore, are the people who hold management positions in these types of sport organizations.

ETHICAL ISSUES FACED BY SPORTS MANAGERS

The unique ethical issues faced by sport managers in each industry segments as mentioned above include

1) Professional Sport ethical issues

Professional sport has very different ethical issues than amateur or school sport, since the purposes of professional sport are entertainment and profits. Sport managers working in professional sport face ethical issues in relation to a number of different constituencies, specifically

1) local communities which support teams, 2) the players, and 3) the front office personnel

2) The intercollegiate ethical issues

The world of intercollegiate athletics is certainly not without its share of ethical issues. Examples of ethical issues within intercollegiate athletics include, but are not limited to 1) whether student-athletes are being exploited by not being paid for their athletic endeavours, 2) the courting of amateur student-athletes by professional player-agents, 3) gender equity, 4) diversity issues, and 5) improprieties by intercollegiate coaches and administrators.

3) The health and fitness industry ethical issues

The health and fitness industry faces a unique set of ethical issues as well. Some of the major issues include 1) high pressure sales, 2) lifetime contracts or contracts which are misleading, 3) abrupt club closings, and 4) clubs employing less than qualified personnel.

4) Recreational sport ethical issues

Today an explosion of interest in recreation has created numerous situations which demand that managers, leaders, and instructors examine ethical decision making in these activities. Sport managers in recreational sport face some of the following ethical issues 1) responsibly incorporating risk, 2) cost of programming, 3) teaching life values, 4) environmental ethics, and 5) professionalization.

5) Facility management ethical issues

Facility managers, especially those in public assembly facilities, face extreme pressure to bring in as much income as possible, giving rise to a number of ethical issues, according to Adams(1996). These issues include 1) dealing with promoters, 2) local politics, 3) ticket sales, 4) employment issues and 5) facility accessibility.

Scandals make headlines, especially in professional sports. One of the most important skill of a manager in sports management is the ability to carefully navigate the murky waters of sports ethics. While some moral decisions are easy to make, other ethical issues in sport management aren't as clear cut. Below are outlined some of the most pressing issues currently facing sports management professionals.

Steroids and Drug Use

Since years, the use of performance-enhancing drugs has been a problem in college and professional sports of all kinds. Performance-enhancing drugs (PEDs) include anabolic steroids, stimulants, human growth hormone and supplements like androstenedione, which helps the body process testosterone. The battle against PEDs has been a long slog. What should sports managers do? Some pundits argue that PEDs should be legalized, and a recent poll by the New York Times shows that younger Americans are less troubled by PED use and believe it to be widespread in American sports. While that may be a solution for the future, the present presents a battle against PEDs for both athletes and sports executives.

Discrimination

Discrimination has many faces. Racism, gender discrimination and homophobia are social justice issues plaguing a wide variety of aspects in our society; the sporting world included. While overt racism in the way sports clubs conduct business has, thankfully, fallen away, racism is still present in sports. Now, the majority of racist action is perpetrated by fans, commentators and individual athletes. It seems society still has a lot of growing to do. Gender discrimination exists both on the field and in the office. It is not the intent of this article to discuss the merit or detriments of co-ed versus single-gender sporting leagues, but the disparity between the genders in sports management careers is grossly evident. And it takes a huge deal on the part of managers to cope with discrimination gently and ethically.

Gambling

Illicit and insider gambling is the biggest of a problem in sports than it is in anything else in the world. Gambling in India is heavily restricted except for selective categories including lotteries and horse racing. In the 21st century, more people have started making cash bets upon prohibited betting and gambling activities in India. The critics of gambling claim that it leads to crime, corruption and money laundering while those in favour of a regulated gambling system in India argue that it can be a huge source of revenue for the state. Taking an ethically sound stand in this argument is a great task for managers.

Corruption

Corruption is rampant in the sports industry. Corruption already existed at the time of the “good old” Olympic Games of the Antique Era. And it continues to exist in modern competitive sport. Corruption plagues all major Indian sports, including cricket, hockey, weightlifting, and athletics. About half of the sporting agents are willing to do whatever it takes to sign a player or have a win in their court. Sports management professionals face a barrage of ethical challenges. As has been pointed out, sport managers in each segment of the sport industry encounter unique ethical issues. Although the purpose of this article is not to develop an ethical decision making model for sport managers, where they should look for guidance in helping them structure their ethical decision making process but it emphasises on the need to have one by discussing the varied and multidimensional nature of ethical issues in sports. Only a handful of authors have specifically addressed ethical issues confronting sport managers (Branvold, 1996; Crosset and Hums, inpress; DeSensi and Rosenberg, 1996; Ziegler,1992), and none have specifically designed models for ethical decision making within the sport context, but rather have relied on more general business-oriented, rather than sport-oriented, ethical decision making models. Because of the complexity of the sport industry, and the unique ethical issues faced by sport managers in the different segments, it is difficult to pose one particular model as best across the sport industry

Some of the models cited by the authors as possible frameworks for making sound decisions include Trevino's (1986) managerial decision making model of corporate social responsibility and Cavanaugh's (1984) flowchart for ethical decision making. An adaptation of Zinn's (1994) ethical decision making model has also been suggested, which could be applied across the different industry segments but all these models have been developed in sync with the general business industry's. The development of an ethical decision making model for sport managers is obviously an area ripe for additional research and thought.

The business aspect of sports applies to youth league organizations as well as to professional sports. How do organizations manage their sports programs and sporting events? Is the sports organization as a whole following ethical guidelines and making ethical decisions? This is where sports ethics intersects with business ethics. Corporations face increasing competition in a rapidly changing global economy, and with change comes more pressure to develop unethical ways to compete. Many times this pressure leads to the notion that “business is business” and an “anything goes” attitude. This same mind-set can be found in sports. Individuals and teams often face increased change and competition. And, like businesses, the challenges and pressures can come from several entities including government, sports governing organizations, agents, fans, parents (in the case of youth sports),coaches, other athletes, and other clubs.

The need for a greater number of ethically conscious sport managers is evident in contemporary competitive athletics from youth sport to professional athletics. Sport managers, at a vast array of athletic levels, encounter ethically based dilemmas on a daily basis involving a significant number of stakeholders. A foundation of the ethical decision-making process is expressly mentioned as a vital component to the education of business students. These standards can similarly be found in sport management specific accreditation standards. The Commission on Sport Management Accreditation (COSMA) supports and requires sport ethics education for accreditation of both undergraduate and graduate programs across the United States and Canada (COSMA, 2010). There is a need to support and apply this study across the Indian sports management education. Managers and administrators in charge of all types of business ventures are faced with ethical decisions on a daily basis ranging from personnel decisions to specific business strategies

The ramifications of these managerial ethical decision-making opportunities are critical in determining the course of firms. It is significant through this article that leaders today face a greater number of ethical decisions and often with little to no training on the decision-making processes.

Therefore, overstressed and undereducated managers engaged in ethical decisions could champion dangerous outcomes, which were more likely to result in negative consequences for the firm (e.g., significant financial loss or bad publicity) As noted by Duffy, Ganster and Pagon (2002) and Duffy, et al. (2006), interpersonal relationships, both internal and external to firms, “are critical determinants of what occurs in any organizations –how it functions, how effectively it performs its central tasks, and how it reacts to its external environment”. In order to address these concerns and prevent undesirable effects, business scholars and practitioners developed and thoughtfully employed to a series of seminal decision-making models and stage progressions of moral cognition (e.g., Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Jones, 1991; Kohlberg, 1969, 1973; Rest, 1986, Trevino, 1986). As a result, many firms experienced positive impacts by analyzing the decision-making process, either through the implementation of a scholarly model or the self-examination of organizational practices, missions, philosophies and values (Useem, et al., 2005). Interestingly, despite this recognition by other management disciplines (e.g., marketing), a limited amount of scholarly attention has been given to ethical decision-making models in the sport business and management context.

Kjeldesen (1992) explained that this lack of attention is peculiar because “sport managers must deal with...complexities perhaps more than managers in other sectors of society where the organizational mission is less integrated with other fields...”

In order to increase the ethical awareness and acumen of the current and future sport managerial workforce, a greater emphasis must be placed on establishing an ethical foundation and decision-making process in sport administration and management academic programs. Many sport intellectuals understand the positive ramifications that can come from a responsible ethical educational approach .

Therefore, it becomes apparent that the construction of a comprehensive ethical decision-making model for sport managers that can be practically implemented in elite competitive organized sport (e.g., varsity interscholastic sport, intercollegiate sport, professional athletics) is necessary. Additionally, an ethical decision-making model is uniquely positioned to add to the growing volume of sport management literature and educational pursuits.

Scandals and concerns over ethics in sports will continue to plague the sports industry. Just about any type of career in athletics is going to involve moral and ethical dilemmas. Ethics for sports management professionals is particularly important because managers and leaders influence the conduct of the athletes, teams and organizations they oversee. Hence, it is vital that aspiring sports and recreation leaders know how to handle the complex challenges of ethics in sports.

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Comparison Of Selected Anthropometric Variables Between Tribal And Non-Tribal School Players Of Himachal Pradesh

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Abstract

The present study has been conducted on 300 players with an aim to find out the difference in selected anthropometric characteristics between tribal (n=150) and non-tribal (n=150) senior secondary school players of Himachal Pradesh. Tribal sample were taken from the two tribal districts i.e. Lahaul- Spiti and Kinnaur and two tribal tehsil i.e. Bharmour and Pangi of Chamba district in Himachal Pradesh. Non-tribal sample were taken from the three districts i.e. Hamirpur, Bilaspur and Una of Himachal Pradesh. Each player was tested for various anthropometric measurements necessary for estimation of body weight, height, chest circumference, upper arm circumference, forearm circumference, thigh circumference and calf circumference of tribal and non-tribal players. To analyze the difference in selected anthropometric characteristics of two groups of tribal and non-tribal players were determined through 't' test. From the findings, it has been found that non-tribal senior secondary school players possessed significantly upper arm circumference, forearm circumference and calf circumference and depicted somewhat higher mean value for height. The tribal senior secondary school players possessed significantly higher chest circumference and depicted somewhat higher mean value in weight and thigh circumference. Key Word: Circumference

Introduction

The term anthropometry refers to measurement of human body in terms of the dimensions of bone, muscle, and adipose (fat) tissue. Measures of subcutaneous adipose tissue are important because individuals with large values are reported to be at increased risks for hypertension, adult-onset diabetes mellitus, cardiovascular disease, gallstones, arthritis, and other disease, and forms of cancer. Today, anthropometry plays an important role in industrial design, clothing design, ergonomics and architecture where statistical data about the distribution of body dimensions in the population are used to optimize products. Changes in life styles, nutrition and ethnic composition of populations lead to changes in the distribution of body dimensions (e.g., the obesity epidemic), and require regular updating of anthropometric data collections. Anthropometry is not merely an ensemble of techniques and measurements, but it is a powerful method for description and analysis of body size, shape, form and proportions. It has been extensively used to quantify and analyze human growth and as such it has become an important specialization not only in anthropology and human biology but also of sports sciences, nutrition, medical sciences, aerospace engineering, operational designing, psychology and numerous other sciences. For classification as well as for comparison of certain measurement such as the ratio of height weight, length of the limbs depth and width and the circumference of different parts of the body have an important role in the field of sports performance.

In physical education coaches and scientists have long realized that the performance of an individual is greatly influenced by such factors as height, weight and body structure. The performance diagnosis can only be done through definite knowledge and the understanding of physical characteristics and their relationship of the complex movement mechanism.

The Knowledge of this science equips us with the techniques of various body measurements which ultimately deal with the assessment of human physique, body composition, physical growth, maturation and gross functions of the human body. The inter-relationship between each of these above mentioned variables with the success in sports can be regarded as a proven fact today (Cureton, 1951; Sargent, 1887; Tanner, 1964. Various researches suggest that suitable physique plays a predominant role for success in sports Cureton, 1951 and Hirata, 1966 & 1979; de Garay et al. 1974; Kemper, 1985; Mathur et al. 1985). The investigator in the underline study would like to assess and compare the anthropometric variables between tribal and non-tribal senior secondary school players of Himachal Pradesh.

Objectives of the study

The following objectives have been laid down for the present study:

To study and find out the difference in anthropometric characteristics of Senior secondary school male players of tribal and non-tribal areas of Himachal Pradesh in respect of their anthropometric characteristics. i.e.: (a) General body measurements: body weight and stature/height (b) circumferences: chest circumference, upper -arm circumference, forearm Circumference, thigh circumference and calf circumference.

Hypotheses

It is hypothesize that there would be no significant difference between senior secondary school tribal and non-tribal male players in respect of their anthropometric characteristics i.e.: (a) General Body Measurements: body weight and statute / height.

(b) Circumferences: chest circumference, upper-arm circumference, forearm circumference, thigh circumference and calf circumference.

Methods And Materials

To achieve the purpose of the present study 300 players i.e. tribal (n=150) and non-tribal (n=150) were selected randomly from the six district of Himachal Pradesh i.e. tribal (Kinnaur, Lahaul & Spiti and two tribal tehsil i.e. Bharmour & Pangi of Chamba district) and non-tribal (Hamirpur, Bilaspur and Una) are used as subjects in this study. Age group ranged from 18 to 25 Years. Each players was tested for various anthropometric measurements necessary for estimation of body weight, height, chest circumference, upper arm circumference, fore arm circumference, thigh and calf circumference. Weighing scale, anthropometric rod and measuring tape were used for the measurements. To test the significance of mean difference between tribal and non-tribal male players, statistical technique of 't' test was applied.

3. RESULTS

Table 1: t-value for tribal and non-tribal male players with respect to their mean score on body weight component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	df	t
Tribal	Body weight	150	52.32	6.035	.167	.493	298	.190
Non-Tribal		150	52.15	8.918		.728		

Not significant at 0.05 level of confidence

Table value of 't' at 0.05 level =1.97 for df 298

Table value of 't' at 0.01 level =2.59 for df 298

As per table No.1 the mean value of body weight of senior secondary school tribal male players is 52.32, the mean value of senior secondary school non-tribal male players is 52.15. The mean difference is .167 and S.D of tribal male players is 6.035 and non-tribal male players is 8.918 respectively. The calculated 't' value came out to be .190, which is statistically insignificant at 0.05 level of significance.

This indicated that tribal and non-tribal senior secondary school male players are more or less the same on the variable of 'body weight'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of body weight*" null hypothesis stand accepted.

Table 2:t-value for tribal and non-tribal male players with respect to their mean score on stature/height component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Stature/ Height	150	165.55	6.181	1.133	.505	298	1.475
Non-Tribal		150	166.69	7.105		.580		

Not significant at 0.05 level of confidence

As per table No.2 the mean value of stature/height of senior secondary school tribal male players is 165.55 the mean value of senior secondary school non-tribal male players is 166.69.The mean difference is 1.133 and S.D of tribal male players is 6.181 and non-tribal male players is 7.105 respectively. The calculated 't'-value came out to be 1.474, which is statistically insignificant at 0.05 level of significance.

This indicated that tribal and non-tribal senior secondary school male players are more or less the same on the variable of 'stature/height'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of stature/height*" null hypothesis stand accepted.

Table 3:t-value for tribal and non-tribal male players with respect to their mean score on Chest Circumference component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Chest Circumference	150	80.27	3.966	1.620	.324	298	2.293*
Non-Tribal		150	78.65	7.689		.628		

*Significant at 0.05 level of confidence.

As per table No.3 the mean value of chest circumference of senior secondary school tribal male players is 80.27, the mean value of senior secondary school non-tribal male players is 78.65.The mean difference is 1.620 and S.D of tribal male players is 3.966 and non-tribal male players is 7.689 respectively. The calculated 't'-value came out to be 2.293, which is statistically significant at 0.05 level of significance.

This indicated that tribal and non-tribal senior secondary school male players differ significantly in the variable of 'chest circumference'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of chest circumference*" null hypothesis stand rejected.

Table 4:t-value for tribal and non-tribal male players with respect to their mean score on Upper Arm Circumference component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Upper arm Circumference	150	23.18	1.424	.987	.116	298	3.535**
Non-Tribal		150	24.17	3.108		.254		

**Significant at 0.01 level of confidence.

As per table No.4 the mean value of upper arm circumference of senior secondary school tribal male players is 23.18, the mean value of senior secondary school non-tribal male players is 24.17.

The mean difference is .9 87 and S.D of tribal male players is 1.424 and non-tribal male players is 3.108 respectively. The calculated 't'-value came out to be 3.535, which is statistically significant at 0.01 level of significance.

This indicated that tribal and non-tribal senior secondary school male players differ significantly in the variable of 'upper arm circumference'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of upper arm circumference*" null hypothesis stand rejected.

Table 5 :t-value for tribal and non-tribal male players with respect to their mean score on Forearm Circumference component of anthropometric variable

**Significant at 0.01 level of confidence.

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Forearm Circumference	150	22.65	1.405	.713	.115	298	3.171**
Non-Tribal		150	23.37	2.370		.193		

As per table No.5 the mean value of forearm circumference of senior secondary school tribal male players is 22.65, the mean value of senior secondary school non-tribal male players is 23.37. The mean difference is .713 and S.D of tribal male players is 1.405 and non-tribal male players is 2.370. The calculated 't'-value came out to be .3171, which is statistically significant at 0.01 level of significance.

This indicated that tribal and non-tribal senior secondary school male players differ significantly in the variable of 'fore arm circumference'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of fore arm circumference*" null hypothesis stand rejected.

Table 6 :t-value for tribal and non-tribal male players with respect to their mean score on Thigh Circumference component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Thigh Circumference	150	44.93	2.805	.553	.229	298	1.244
Non-Tribal		150	45.48	4.671		.381		

Not significant at 0.05 level of confidence.

As per table No.6 the mean value of thigh circumference of senior secondary school tribal male players is 44.93, the mean value of senior secondary school non-tribal male players is 45.48. The mean difference is .553 and S.D of tribal male players is 2.805 and non-tribal male players is 4.671. The calculated 't'-value came out to be 1.244, which is statistically insignificant at 0.05 level of significance.

This indicated that tribal and non-tribal senior secondary school male players are more or less the same on the variable of 'thigh circumference'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of thigh circumference*" null hypothesis stand accepted.

Table 7:t-value for tribal and non-tribal male players with respect to their mean score on Calf Circumference component of anthropometric variable

Group	Variable	N	Mean	S.D	M.D	S.E.M	d f	t
Tribal	Calf Circumference	150	29.77	1.578	.987	.129	298	4.215**
Non-Tribal		150	30.75	2.394		.195		

**Significant at 0.01 level of confidence

As per table No.7 the mean value of calf circumference of senior secondary school tribal male players is 29.77, the mean value of senior secondary school non-tribal male players is 30.75. The mean difference is .987 and S.D of tribal male players is 1.578 and non-tribal male players is 2.394 respectively. The calculated 't'-value came out to be 4.215, which is statistically significant at 0.01 level of significance.

This indicated that tribal and non-tribal senior secondary school male players differ significantly in the variable of 'calf circumference'. Hence the formulated hypothesis that "*there would be no significant difference between tribal and non-tribal senior secondary school male players in the variable of calf circumference*" null hypothesis stand rejected.

Discussion

It has been found that tribal male players possess greater body weight and lesser stature/height than non-tribal male players. There was insignificant difference established between tribal male players and non-tribal male players in general body measurement i.e. body weight and height. This indicates that tribal male players and non-tribal male players have approximate same development of body weight and stature/height.

It has been found that tribal male players possess greater value for chest circumference and lesser value for upper arm circumference, forearm, thigh and calf circumference than non-tribal male players. There was significant difference established between tribal male players and non-tribal male players in chest circumference, upper arm, forearm, and calf circumference. However there was no significant difference in thigh circumference. This indicates that non-tribal male players have greater circumference of upper arm, forearm and calf circumference and lesser circumference of chest than tribal male players, but possess near about same value for thigh circumference.

Conclusions

Tribal and non-tribal senior secondary school male players do not differ significantly on the variable of body weight. Tribal and non-tribal senior secondary school male players do not differ significantly on the variable of stature/height. Tribal and non-tribal senior secondary school male players differ significantly in the variable of chest circumference. Tribal and non-tribal senior secondary school male players differ significantly in the variable of upper arm circumference. Tribal and non-tribal senior secondary school male players differ significantly in the variable of fore arm circumference. Tribal and non-tribal senior secondary school male players do not differ significant on the variable of thigh circumference. Tribal and non-tribal senior secondary school male players differ significantly in the variable of calf circumference.

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Importance Of Health And Fitness In Life

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Introduction

Health and fitness is the key to a long, active and enjoyable life. It is correctly stated that Health is the actual Wealth that a person can retain. Teachers assign this topic to their students to enhance their knowledge about staying healthy and fit, and create awareness among others as well. It also results in the development of a healthy lifestyle for children. Being healthy and fit in simple terms means taking good care of the body. We should remember that a healthy mind resides only in a healthy body. Good health of both mind and body helps one maintain the required energy level to achieve success in life. All of us must strive to achieve wholesome health. Protecting your body from the intake of harmful substances, doing regular exercises, having proper food and sleep are some of the important instances that define a healthy lifestyle. Being fit allows us to perform our activities without being lethargic, restless or tired. A healthy and fit person is capable of living the life to the fullest, without any major medical or physical issues. Being healthy is not only related to the physical well being of a person, it also involves the mental stability or the internal peace of a person. Generally, a healthy diet consists of taking a proper and healthy food which includes eating green and fresh vegetables, fruits, having milk, eggs, minerals, proteins and vitamins essential for a human's lifestyle. Practicing Yoga including regular exercises in your daily routine also help you maintain your desired fitness, blood sugar and immunity level. Healthy habits improve your physical appearance, mental stability, ability to perform activities in a better way, which help you lead a stress-free lifestyle, maintaining happy moods, high energy levels, etc. Each individual should take of one's health on a priority; no single day should be skipped for making efforts on maintaining physical and mental fitness. Being happy is directly related to boosting your mental strength and health, so happiness can be considered as the result as well as the part of a healthy and fit lifestyle. Health can, generally, be measured on major three parameters: Physical, Psychological and Nutritional.

Objective:

The main objective of this paper is to study the importance of fitness and health in one's life.

Methodology:

We used secondary data such as literature review for the analysis of this paper.

Physical health means the physical appearance of a person; Nutritional health means the presence of essential nutrients in the body to fight diseases with immunity. Psychological health means the ability in a person to maintain patience, calm and composure in all circumstances of life. Health professionals consider cancer, diabetes and several other mental and physical health issues such as depression, lethargic attitude, etc to deficiencies in fitness and well-being of a person. Unhealthy and unfit lifestyle of a person also results in premature death. Obesity and lack of physical fitness in young generation sets the stage for diabetes, heart disease, and other serious health problems. Walking, running, cycling, playing, swimming, gardening, skipping, weight-lifting and Yoga are some of the important activities which help us maintain fit and healthy lifestyle.

A person who is fit both physically and mentally is strong enough to face the ups and downs of life, and is not affected by drastic changes in the circumstances. One should also spend time outdoors in the sun, inhaling fresh air and taking part in healthy activities. Staying active makes you stay energetic. Out of the several components that affect one's health, following are the seven key physical components to ensure the overall good health, fitness and mental well-being:

Cardiovascular/Aerobic Conditioning, Strength Training and Muscular Development
Stretching – Muscles, Ligaments and Tendons, Core Stability – Both physical and mental
Nutrition and Supplementation – Balanced Diet Mental Rest and Relaxation – Balanced lifestyle
Sleep – Regular sleep

Eating healthy and nutritious food, exercising, taking sufficient sleep, avoiding intake of harmful substances are just a few simple ways to stay healthy and fit. These are directly related to our mental, physical and emotional health. Fitness and mental well-being are essential parts of a healthy life. The benefits of an active and healthy lifestyle are undeniable by all means. Whether you decide to increase your activity levels slightly or develop and participate in a thorough fitness plan, it will pay you off in the long run. Exercise is good for your health of various organs of your body and makes you feel stronger. Nutrition and fitness are essential for a healthy living. Not only we look and feel good, but by eating the right nutritional food and doing the right amount of exercise, we could also lower the chances of getting some pretty serious life-threatening diseases.

Things to be done for maintaining a balanced healthy and fit lifestyle:

Keeping body hydrated – Drink ample water
Washing hands before and after meals – Maintain sanitation
Regular exercise, Intake of nutrients
Regular, sound sleep

Good health helps a person to live one's life to its fullest potential without being physically or mentally unfit. Unhealthy lifestyle results in deterioration of one's well-being. Staying healthy and fit is very important for each generation. Exercising and eating healthy are the best ways to retain your health both physically and mentally. People, who take their health seriously and are serious about maintaining their fitness, do exercises on a daily basis, eat a healthy diet, and sleep well on time for adequate duration. Being healthy and fit allows you to stay active and further increases your confidence and concentration power. By staying healthy and fit, one can set an example for others and slowly help others increase their health, nutrition, knowledge, and consumption of sustainably produced foods.

Major reasons that lead to the deterioration of health are as follows:

Daily stress – Students often feel stressed about school work, and exams. Professionals are also prone to stress with regard to their life and work. Such conditions lead to imbalanced mental health.

Depression – Prolonged stress about something leads to depression and becomes a health issue.

Intake of harmful substances like alcohol, preserved foods, etc, adversely affect the physical and mental health and fitness.

Lack of sleep – People tend to work late at night, constantly use their phones, etc and forego their destined sleep cycle. As suggested by medical experts, a defined time of sleep is mandatory for each individual. Lack of sleep results in an unfit lifestyle.

Junk foods – Intake of junk foods has replaced the proper nutritional diet that one should consume. Unhealthy food habits directly create unhealthy well-being.

Natural phenomena such as pollution, etc also make us unhealthy and unfit. Proper preventive measures must be taken to defend ourselves against adverse natural environment.

Following are the things that lead to maintenance of a healthy and fit person:

Regular Exercise routine – Each individual should focus on a defined time for daily exercise, as it directly affects both mental and physical health of a person.

Balanced nutritional food intake – One should concentrate on each and every thing to eat and drink. Having a balanced diet that includes essential minerals, vitamins and proteins makes a person healthy and fit.

Clean and tidy environment – We should make sure our surroundings clean and fit for us to survive.
Take appropriate amount of sleep. Each individual, as per medical norms, should take at least 8 hours of sleep.

Drink loads of water, as it helps to release toxins and improve one's metabolism

Maintain hygiene and have proper sanitation.

Have a positive outlook towards life. For mental health, it is the key to stay fit and healthy. Positive thoughts should rule the mind in order to stay happy and maintain the mental and emotional health and fitness.

Staying healthy and fit is not difficult if taken as the foremost priority. By following the above-mentioned simple steps, each one of us can lead a healthy, fit and fruitful life. Maintaining balance of thoughts, nutritional diet, rigorous exercise, Yoga, optimum level of sleep are actually the main contributory factors for our wellbeing and a healthy and fit lifestyle.

Conclusion:

Health is the most important thing that a person should take care of. Leading a healthy lifestyle leads to happiness, success and achievements. Sound health not only means keeping a health body but it also includes a healthy mental condition. Our health depends upon several factors such as food, pollution, regular sleeping habits, fresh air, water, sunlight, and healthy mental condition. Morning walks and physical exercises are very helpful for ensuring the fitness of our mind and body. We create the conditions that lead to an unhealthy and unfit lifestyle. That's a fact. So, we should develop good habits, and become capable of taking the required measures to lead a healthy and fit lifestyle. The way towards Healthy and Active wellbeing is to focus on making the healthy choice at any given moment, rather than postponing the things that are must to be done in the long term.

A Study on oxidative stress and antioxidant status of Indian Endurance athletes

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Abstract

The aim of present study is to know the status of lipid peroxidation and antioxidant status of Indian endurance athletes in comparison to age and sex matched sedentary counterparts. Status of lipid peroxidation and activity levels of Catalase (EC 1.11.1.6) & Superoxide dismutase (SOD, EC 1.15.1.1) in male athletes and sedentary population was investigated. Both the groups' i.e. sedentary (S group) and athlete (A group) consist of thirty subjects each. Group A includes endurance athletes of 20KM Walk involved in regular physical activity while the group S includes sedentary subjects those who are not involved in regular physical activity. The blood serum was used for activity levels of enzymes and other parameter. The serum catalase, superoxide dismutase & malondialdehyde were significantly ($P < 0.05$) high in group A (athletes) as compare to group S (sedentary). Due to regular physical activity both oxidative stress and antioxidant capacity increased in athletes as compared with sedentary controls. Key Words: Oxidative stress, Antioxidant status, Malondialdehyde, Catalase etc

Introduction

Cells continuously produce free radicals and ROS as part of metabolic processes. These free radicals are neutralized by an elaborate antioxidant defense system consisting of enzymes such as catalase, superoxide dismutase, glutathione peroxidase, and numerous non-enzymatic antioxidants, including vitamins A, E and C, glutathione, ubiquinone, and flavonoids. Exercise can cause an imbalance between ROS and antioxidants, which is referred to as oxidative stress (Urso & Clarkson, 2003). While regular exercise training is associated with numerous health benefits, it can be viewed as an intense physical stressor leading to increased oxidative cellular damage, likely due to enhanced production of ROS (Bloomer et al, 2005). The high production of reactive oxygen species may be responsible for a series of physiological and biochemical changes that occur during exercise (Alessio, 1993). It has been reported that strenuous physical exercise produces a decrease in antioxidant levels and an increase in the markers of lipid peroxidation in target tissues and blood (Davies et al, 1982; Vasankari et al, 1995). A proliferation of these free radicals can cause a decrease in the function of affected cells and can result in a decreased ability of muscles to maintain work. Hydrogen peroxide is a harmful by-product of many normal metabolic processes: to prevent damage, it must be quickly converted into other, less dangerous substances. To this end, catalase (EC 1.11.1.6) is frequently used by cells to rapidly catalyze the decomposition of hydrogen peroxide into less reactive gaseous oxygen and water molecules (Gaetani et al, 1996). Superoxide dismutase (SOD, EC 1.15.1.1) is a class of enzyme that catalyze the dismutation of superoxide into oxygen and hydrogen peroxide. As such, they are an important antioxidant defense in nearly all cells exposed to oxygen. Malondialdehyde (MDA) is a naturally occurring product of lipid peroxidation. Lipid peroxidation is used as an indicator of oxidative stress in cells and tissues (Yagi, 1998; Armstrong & Brown, 1994). Lipid peroxides, derived from polyunsaturated fatty acids are unstable and decompose to form a complex series of compounds such as malondialdehyde. The aim of present study is to know the status of lipid peroxidation and antioxidant status of Indian endurance athletes in comparison to age and sex matched sedentary counterparts.

Materials and Methods

Subjects: Two groups comprising 30 endurance athletes, (average age \pm SD, 23.18 ± 1.83 years) and 30 sedentary controls (average age \pm SD, 24.55 ± 1.8 years) were studied. All subjects were male. The endurance athletes belong to Indian athletes of 20KM Walk event of athletics with minimum 4 years of training experience. On the other hand the control subjects were sedentary do not involve in regular physical exercise, but are healthy. Upon review of the medical history questionnaire, persons with any type of illness and smokers were excluded from the study.

Methods: A prior written consent was taken from each participant that they are voluntarily ready for blood sampling for this research work. Five (5) ml of venous blood was withdrawn from each subject after an overnight fasting of 12 hours. Malondialdehyde, activities of catalase and superoxide dismutase in serum was determined by a colorimetric method employing Cayman's assay kits. The results obtained by all the parameters were analyzed by t-test to find out the difference between the two groups.

Cayman's Catalase Assay Kit utilizes the per-oxidative function of CAT for determination of enzyme activity. The method is based on the reaction of the enzyme with methanol in the presence of an optimal concentration of H_2O_2 . The formaldehyde produced is measured colorimetrically with 4-amino-3-hydrazino-5-mercapto-1, 2, 4-triazole (Purpald) as the chromogen. Purpald specifically forms a bicyclic heterocycle with aldehydes, which upon oxidation changes from colorless to a purple color. The assay temperature is $25^\circ C$ and catalase activity is measured colorimetrically at 540 nm. When a series of 45 catalase measurements were performed on the same day, the intra-assay coefficient of variation was 3.8%. When a series of 45 catalase measurements were performed on five different days under the same experimental conditions, the inter-assay coefficient of variation was 9.9%. (Johansson and Borg, 1988). Cayman's Superoxide Dismutase (SOD) Assay Kit utilizes a tetrazolium salt for detection of superoxide radicals generated by xanthine oxidase and hypoxanthine. One unit of SOD is defined as the amount of enzyme needed to exhibit 50% dismutation of the superoxide radical. The assay temperature is $25^\circ C$. SOD activity is measured colorimetrically at 530-540 nm. When a series of 60 SOD standard measurements were performed on the same day, the intra-assay coefficient of variation was 3.2%. When a series of 60 SOD standard measurements were performed on five different days under the same experimental conditions, the inter-assay coefficient of variation was 3.7% (Marklund, 1980).

Results

Table 1 Mean SD and t value of markers of oxidative stress and antioxidant of both the groups.

BIOCHEMICAL PARAMETERS	Group S (N=30)	Group A (N=30)	t-Value
	Mean \pm SD	Mean \pm SD	
MALONDIALDEHYDE (nmole/ml)	15.83 \pm 6.37	46.86 \pm 8.96	15.71*
CATALASE (nmole/min./ml)	9.30 \pm 2.95	22.97 \pm 5.55	12.10*
SUPEROXIDE DISMUTASE (U/ml)	0.09 \pm 0.05	0.21 \pm 0.18	3.63*

*Significant at 5% Level (2.00)

As shown in table no.1 there is significant difference found in the level of malondialdehyde between sedentary (15.83 \pm 6.37) and athlete group (46.86 \pm 8.96) has shown significant difference at 5% level of significance (15.71). The level of catalase between sedentary (9.30 \pm 2.95) and athlete group (22.97 \pm 5.55) has shown significant difference at 5% level of significance (12.10). The level of superoxide dismutase between sedentary (0.09 \pm 0.05) and athlete group (0.21 \pm 0.18) has shown significant difference at 5% level of significance (3.63).

Discussion

The results of the present study shows that the athlete group have significantly high values of catalase, superoxide dismutase and amount of lipid peroxidation product i.e. malondialdehyde. That means there is a significant increase in oxidative stress and antioxidant status of athletes which is supported by the various studies showing that long-term habitual exercise always creates oxidative stress while developing the antioxidant system (Powers & Lennon, 1999; Ji, 1995). Powers & Lennon (1999) proposed that the exercise causes an increase in the production of reactive oxygen species. It was also found that regular exercise can increase the antioxidant capacity (Kahraman, et al, 2003; Alessio, 1993; Close et al, 2006; Medved, et al, 2004). In the present study the subjects were athletes, they had been exercising regularly for several years and took part in competitive sport.

We are of the opinion that this may be a factor in the increased enzymatic antioxidant defense in these athletes as compare to sedentary group. Several studies have shown that lipid peroxidation produced by exercise is higher in relation to the control group (Cooper et al, 2002; Groussard et al, 2003). However; another study has found no difference in lipid peroxidation (Ookawara et al, 2003).

CONCLUSION

Increase in oxidative stress and antioxidant status of Indian athletes may be connected to long-term regular exercise and has the dual effect of increased lipid peroxidation (MDA concentration) leading to oxidative stress and increased level of antioxidant enzymes which act against the oxidative damage.

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The Effect Of Small-Sided Games In The Development Of Technical Demands Of Bahirdar University 2nd Year Sport Science Male Students

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Abstract

The present study was to examine the effects of small-sided games in the development of technical demands of Bahirdar University 2nd year Sport Science male students. For the purpose of the research Male Sport Science students were selected purposely. All of the members of the team 32 individuals' (ages 19 to 20 years) got involved in this research program. The study subjects were divided into two (16 experimental and 16 control) groups randomly. Then, as a part of pre-test phase, from all participants evaluate technical skills on full side field (10v10). The experimental group received 8 weeks of training using small sided (4v4 and 8v8) games given by the coaches. Each game data was collected by using Carolina United Soccer Association (CUSA) player evaluation form & Hand-based match analysis systems to record frequency counts of successful and unsuccessful actions, Adapted by (Christopher C. et al, (2009) to evaluate technical development of individual skills. The collected data were analyzed by using SPSS (Version 20) software and a one-way ANOVA were used to test the significance of the results. The present study indicated that as the result of small sided games a statistically significant mean difference ($p < 0.05$) was obtained between the experimental and control groups on the development of technical skills of youth players. The present study showed that small sided game training has significance effects on technical skill variables (passing, dribbling and shooting) of experimental than control group. Key words: small-sided games, technical skills, technique

Introduction:

In children's football, administrators and coaches often organize children's games on adult size pitches, with adult size goals and adult size equipment. This is often done with the desire to get children playing the 'real' game as soon as possible. However, the individual and developmental constraints often lead to children having to develop unique solutions to performance demands (Williams & Hodges, 2005). Although football coaches are able to adjust pitch sizes in training sessions to match the emergent constraints of the individuals they are working with (Guerin & Kunkle, 2004), in competition, pitch sizes are set by administrators. The adult sized pitch was defined in 1897; 100 - 130 yards by 50-100 yards for domestic matches; 110 - 120 yards, (100 -110m) by 70-80 yards, (64 - 75m) for international matches (FIFA, 2007). Indeed, the reduction in the numbers of goals scored over time has led to many observers suggesting the need for bigger pitches or a reduction in the number of players on the pitch.

Pitch size is an integral variable in constraints-led sports performance and learning. Specifically, pitch size will determine distance between players on the field at the start (and re-start) of game-play, which is often greater than the perceived kicking efficacy of younger players (Huddleston, 2007). Football coaches at all levels of the game use small-sided games (SSGs) as a way of developing a team's technical and tactical skills (Jones & Drust, 2007) whilst imposing a specific physiological demand that exceeds that of a competitive game, (Coutts & Roswell, 2009). SSGs can be manipulated through the use of various modifications that affect the physical, physiological, technical and tactical demands of the players. These modifications include, but are not limited to, the pitch size, the number of players involved, the game's rules and playing time (Lago-Penas & Chamari, 2011).

Small-sided games are very popular not only in adult soccer players but also in young players and their use begins from an early age. Due to the smaller pitch and the less number of participants during small-sided games, each player comes into contact with the ball and deals with common game

situations more often (Capranica, 2001). These situations require good technical skills such as passing, dribbling and shooting. It has been argued that smaller fields are much better suited to the technical and tactical ability of youth players (US Youth Soccer, 2007). However, despite the importance that appears to be attached to technical ability as a constraint on the design of pitch dimensions, there is no published data available that looks into this relationship in Youth football players (Lee, 1993), this is in general true in Ethiopian context and particularly in Bahirdar University 2nd year sport science male students.

The present study sets out to investigate the effect of Small-Sided Games in the development of technical ability of Bahirdar University 2nd year sport science male students. For the present study, Small-Sided Games is considering two options that include the number of players determined as (4v4) and (8v8). Technical ability for this study was considered as passing, dribbling, and shooting abilities.

Statement of the Problem

Some governing bodies have already introduced laws of play specifically for the junior game which can apply in competitive matches. Australian football administrators for example have been working on a root-and-branch reform program for all levels of the game announcing a series of changes in November 2007 (Lynch, 2007). Among the recommendations were philosophical changes to the way junior football is played and coached, with more emphasis on skills development through teams of fewer players rather than having juniors as young as playing competitive games on full-size pitches (Lynch, 2007). Therefore, the football field size should at least be in proportion to the player size, age, technical kicking ability (distance and accuracy), and the number of players on the pitch at a given time.

Taking this in to consideration, the researcher would try to see the problems that affect Bahirdar University 2nd year sport science male students' technical skills.

Therefore, the present study focused on the above raised issues so as to see the effect of SSGs training on the technical skill development of Bahirdar University 2nd year sport science male students.

Hypotheses

The following research hypotheses were formulated to correspond to the research objectives.

H1: There is a significance effect of Small-Sided Games on the improvement of technical skills of Bahirdar University 2nd year sport science male students.

H1a: Small-Sided Games have a significance outcome on the development of dribbling skills of Bahirdar University 2nd year sport science male students.

H1b: Small-Sided Games have a significance result on the progress of passing skills of Bahirdar University 2nd year sport science male students

H1c: Small-Sided Games have a significance effect on the improvement of shooting skills of Bahirdar University 2nd year sport science male students

Significance of the Study

This study has the following benefits:

The Bahirdar University 2nd year sport science male students will benefit from this study so as to improve their technical skills. The study is expected to have importance for all concerned bodies such as SPORT SCIENCE instructors, coaches' and even players to give insight on the effects of small sided games on technical demands and coaching methods on the youth project. In doing so, it may introduce the importance of Small-Sided Games for selection of players.

The study could be used as a reference for coaches in general and bring satisfaction to the further investigation around the effects of Small Sided Games on technical demands of the players.

The study may also be used as input for future researchers and put forward to Bahirdar University Sport Academy to bring solutions on the technical demands of Small-Sided Games for youth players.

Scope of the Study

Among the three batches of Bahirdar University Sport Acedemy Sport Science students' male students, the researcher preferred second year students that took the football course. The study uses 32 male Bahirdar University 2nd year sport science students as participants of the study; they are divided in two groups (16 as experimental group participants and 16 as control groups).

Objectives of the Study

General objective of the study

The general objective of this study is to examine the effect of small sided games in the development of technical demands of Bahirdar University 2nd year sport science male students.

Specific objectives of the study

The specific objectives of this study were to:

Find out the effect of small sided-games (4v4 and 8v8) on using both feet dribbling skill development

Identify the effects of small-sided games (4v4 and 8v8) on the development of passing with crossing and chipping.

Identify the effects of small-sided games (4v4 and 8v8) on the improvement of shooting on accuracy and form.

Investigate the effects of small-sided games (4v4 and 8v8) on the development of passing through defenders.

Research Design

The experimental design was employed in the current study so as to see the effect of SSGs on technical skill developments. The sample consists of 32 male players from Bahirdar University 2nd year sport science male students. They had trained in the 2015. All the participants gave written consent to participate in accordance with the Bahirdar university sport Academy ethical procedures. The researcher assigned players randomly in to two groups: 16 for experimental group and 16 for control group. The researcher recorded a pre-test results for both groups on the study variables, and then, 8 weeks of training using small sided games (4v4 and 8v8) is given with the help of the coach for the experimental group only, and then the research practitioner examined after 8 week training a post-test to see the effect of small sided games on the development of technical skills.

Sample and sampling technique

The total population of the study was 32 youth foot ball players from Bahirdar University 2nd year sport science male students were selected. Purposive and simple random sampling techniques were used under this investigation. Purposive sampling technique was used to select second year students and simple random sampling technique was used to allocate participants into experimental and control groups. Then, the researcher divided in to two groups by using random sampling technique from each position in experimental group 16 and the remaining 16 participants were in control group for the rationale of the study.

Data Gathering Instruments

Quantitative data were collected through appropriate technical observation before and after training by providing appropriate small sided games training for 8 weeks for experimental group in order to observe the effect of the treatments on experimental group but the control group undertook approximately regular training on the full side field.

The researcher used technical observational checklists as a primary data gathering instruments that are presented below in detail.

Measurement for Technical Skills

Technical ability of Bahirdar University 2nd year sport science male students were assessed individually using the following observation checklists:

Passing: for its measurement uses the Carolina United Soccer Association check list for individual players' using 5 scales (5=Excellent, 4=Very Good, 3=Good, 2=Average, and 1=Needs improvement) skill on: Crossing and Chipping

Dribbling: for its measurement uses the Carolina United Soccer Association check list for individual players' using 5 scales (5=Excellent, 4=Very Good, 3=Good, 2=Average, and 1=Needs improvement) skill on: Using Both Feet; Control; Turns

Shooting: for its measurement uses the Carolina United Soccer Association check list for individual players' using 5 scales (5=Excellent, 4=Very Good, 3=Good, 2=Average, and 1=Needs improvement) skill on: Accuracy and Form

Method Of Data Analysis

After carrying out the collection of data through different instruments, the process of tabulation was carried out. The items were classified in to different tables according to the nature of skills raised in the checklists and then data was analyzed.

In analyzing the data, the quantitative method was employed. Accordingly, all the skills rated from 5=Excellent up to 1=Needs Improvement were analyzed quantitatively by using IBM SPSS (Version 20) software including frequency count and percentage. To check whether there is a significant difference between the experimental and control group, one way ANOVA was employed. For all tests, the level of significance (alpha) is 0.05.

Finding Technical skill development

As it is explained in different parts of this study above, the present study considered dribbling, passing and shooting skills as components of the technical skill of players investigated in this study. Therefore, in this part we are going to present and discuss in relation to all the three technical skills on both experimental and control groups. Finally, the technical skill will be compared among the two groups.

Table 1. Descriptive statistics for the pre and post data of the three technical skills (Dribbling, Passing, and Shooting)

	Random assignment of the participants	N	Mean	Std. Deviation	Std. Error Mean
Pre-Data on dribbling using both feet	Experimental Group	16	2.0625	.77190	.19298
	Control Group	16	1.8750	.88506	.22127
Pre-Data on passing, crossing and chipping	Experimental Group	16	2.3125	.70415	.17604
	Control Group	16	2.1250	.80623	.20156
Pre-Data on shooting accuracy and form	Experimental Group	16	2.0000	.63246	.15811
	Control Group	16	2.3750	.61914	.15478
Post-Data on dribbling using both feet	Experimental Group	16	2.7500	.68313	.17078
	Control Group	16	2.3125	.47871	.11968
Post-Data on passing, crossing and chipping	Experimental Group	16	3.1875	.65511	.16378
	Control Group	16	2.3750	.50000	.12500
Post-Data on shooting accuracy and form	Experimental Group	16	3.0625	.44253	.11063
	Control Group	16	2.4375	.51235	.12809

As we can see from Table 4.1 above, all the pre-data mean values for the three technical skills across the two groups found to be below the cutoff point 3 (For instance, mean values of 2.06, 2.31, and 2.00 found to be for dribbling, passing, and shooting among the experimental group respectively). However, the post-data in the table above revealed that the experimental group showed better mean values of 2.75, 3.19, and 3.06 for dribbling, passing, and shooting. As expected, the control group found to show approximately equal amount of mean values across the three technical skills.

The result found above in Table 4.1 is supported by the One-way ANOVA statistics result presented in tables 4.2 and 4.3 below. As Table 4.2 shows there is no significant difference for all technical requirements across the experimental and control groups. However, the post-treatment data (Table 4.3) the result revealed that there is a significant difference (dribbling $p = 0.044$, passing 0.000 and shooting $p = 0.001$) in experimental group on the other hand control group insignificant effect when p value > 0.05 .

Table 2. Summary ANOVA table for pre-data measures on dribbling, passing, and shooting

		Sum Squares	Df	Mean Square	F	Sig.
Pre-Data on dribbling using both feet	Between Groups	.281	1	.281	.408	.528
	Within Groups	20.688	30	.690		
	Total	20.969	31			
Pre-Data on passing, crossing and chipping	Between Groups	.281	1	.281	.491	.489
	Within Groups	17.188	30	.573		
	Total	17.469	31			
Pre-Data on shooting accuracy and form	Between Groups	1.125	1	1.125	2.872	.100
	Within Groups	11.750	30	.392		
	Total	12.875	31			

Table 3. Summary ANOVA table for post-data measures on dribbling, passing, and shooting

		Sum Squares	Df	Mean Square	F	Sig.
Post-Data on dribbling using both feet	Between Groups	1.531	1	1.531	4.401	.044
	Within Groups	10.438	30	.348		
	Total	11.969	31			
Post-Data on passing, crossing and chipping	Between Groups	5.281	1	5.281	15.552	.000
	Within Groups	10.188	30	.340		
	Total	15.469	31			
Post-Data on shooting accuracy and form	Between Groups	3.125	1	3.125	13.636	.001
	Within Groups	6.875	30	.229		
	Total	10.000	31			

In general, when we see the technical development as a whole a significant difference is observed among the experimental and control groups. This reflects that our first hypothesis (H1) and its sub-hypotheses are accepted in that training using SSGs will enhance their technical development. Table 4.4 below assures what we have said in this paragraph that: there is no significant difference ($p = 1.000$) in the pre-data and significant difference ($p = 0.000$) on the after treatment data.

Table 4. Summary ANOVA table for the Technical development

		Sum Squares	Df	Mean Square	F	Sig.
Pre technical skill as a result of the three specific skills	Between Groups	.000	1	.000	.000	1.000
	Within Groups	4.389	30	.146		
	Total	4.389	31			
Post result on technical skill as a whole	Between Groups	3.125	1	3.125	32.767	.000
	Within Groups	2.861	30	.095		
	Total	5.986	31			

Discussion

The primary aim of this study was to examine the effects of SSGs in the development of technical (dribbling – using both feet's; control; Turns, passing and shooting – Accuracy skills of Bahirdar University 2nd year sport science male students. with in the experimental group only used two specific football small sided game formats, i.e. 4v4 and 8v8 players. When the pitch area of these small sided games are 40x30m and 60x45m respectively.

From the analysis of all the findings of the result of full size field (11v11) indicated that, there is a significant difference on technical skills (dribbling, passing, and shooting skill). In relation to the small sided games (8v8 and 4v4). All of the variables in the P- value are less than 0.05. However, this shows that in all ages can play small-sided games, but it has a greater developmental impact on younger soccer players. In general SSGs training programs used in this study change the players' technical skills.

Conclusion

The findings of this study can be interpreted as being supportive of the importance of the small sided games process in enhancing youth player's technical performance. The use of SSGs in training brought a significant improvement in the Bahirdar University 2nd year sport science male students dribbling, passing, shooting components that are measured on before and after treatment. SSGs found to bring a significant difference of performance as compared to the full size field. Based on the findings above, Wein, (2013) argued that the altering of pitch dimension of SSGs can effectively influence technical actions of players. In contrast to larger formats, smaller formats can elicit obviously more technical actions (e.g. dribbling, passing, and shooting). Lager pitches can cause more diversified technical-tactical actions, such as block and interception as well as long passes. Consequently, altering of playing field of SSGs can be effectively applied for specific technical training.

Further studies should continue to verify how the task constraints imply the effectiveness of the SSGs training process in football, aggregating different contexts and players' experiences.

Recommendations

Based on the findings of this study, the following recommendations can be taken:

Instructors and Coaches, working in the youth project should plan, organize and implement different small sided games skill enhancement programs that can be implemented by them.

Instructors and Coaches have to introduce of 4v4 & 8v8 games and focus on smaller sided games must be used regularly in training and tournaments for U-17 youth football players.

Basic skills like passing, dribbling and shooting of technical awareness and practice can be learned best on SSGs than the full size field. Thus, instructors and coaches of youth football players should focus on the SSGs.

Instructors and Coaches should designed different small sided game training according to the age and participant of players for the technical development of football at the youth level.

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Effect of Different Packages of Yogic Practices on Mental Health, Plasma Glucose, Self Esteem Cortisol, High Density Lipoproteins, Anxiety Variables among Overweight Female in Chennai

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Meaning Of Yoga: Yoga is the “Union of the individual self with the universal self” (Iyengar, 2001). Yoga means the union or communication or unity with our inner being. “Asana” means a state of being in which we can remain steady, calm, quiet and comfortable with our physical body and mind.

Meaning of CORTISOL: Cortisol, known more formally as hydrocortisone (INN, USAN, BAN), is a steroid hormone, more specifically a glucocorticoid, produced by the zona fasciculata of the adrenal cortex (Scott, 2011).

STATEMENT OF THE PROBLEM: The purpose of the study was to find out the effect of different packages of yogic practices on selected lipid profile status, physiological and psychological variables among overweight middle aged women.

SELECTION OF VARIABLES: the following variables were selected. Mental Health, Plasma glucose, Self esteem, Cortisol, High density lipoproteins, Anxiety, INDEPENDENT VARIABLES-Experimental group I – Yogic package, Experimental group II - Yogic package, Group III – Control group

SELECTION OF SUBJECTS: Forty five overweight middle aged women were randomly selected as subjects from Chennai City, Tamil Nadu. The subject’s age ranged between 40 to 50 years. The subjects were randomly divided into FOUR groups such as experimental group I, experimental group II and control group and each group contains fifteen subjects.

EXPERIMENTAL DESIGN: The study was formulated as a true random group design consisting of a pre test and post test. The middle aged overweight women (N=45) were randomly assigned to three equal groups of fifteen each. The groups were assigned as experimental group - I (Yogic practices), experimental group - II (Yogic practices) and control group respectively. Pre and post tests were conducted for all the 45 subjects on selected lipid profile status, physiological and psychological variables before and after the experimental period of twelve weeks. The two experimental groups were treated with their respective yogic programme for one hour per day for five days a week for a period of twelve weeks.

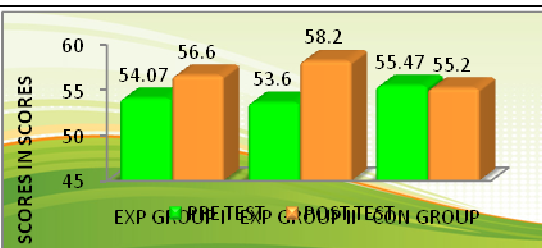
STATISTICAL PROCEDURE: Analysis of co-variance statistical technique was used to test the adjusted post test mean differences among the experimental groups and control group. If the adjusted post test result was significant, then the Scheffe’s post hoc test was used to determine the significance of the paired mean differences (Thirumalaisamy, 1998).

TABLE I -COMPUTATION OF ANALYSIS OF COVARIANCE ON MENTAL HEALTH

Means	Exp Group I	Exp Group II	Control	SV	SS	df	MS	Obtained 'F'
Pre test	54.07	53.60	55.47	B	28.31	2	14.16	1.04
				W	574.27	42	13.67	
Post test	56.60	58.20	55.20	B	67.60	2	33.80	3.79*
				W	374.40	42	8.91	
Adjusted post test	56.79	58.67	54.52	B	124.81	2	62.40	17.09*
				W	149.72	41	3.65	

TABLE I(a)-COMPUTATION OF SCHEFFE'S POST HOC TEST ORDERED ADJUSTED FINAL MEAN DIFFERENCE OF MENTAL HEALTH

Experimental Group II	Experimental Group I	Control Group	MD	CI
58.69	56.79	-	1.90*	1.77
58.69	-	54.52	4.17*	1.77
-	56.79	54.52	2.27*	1.77



DISCUSSION ON THE FINDINGS OF MENTAL HEALTH : From these analyses, it was found that the results obtained from the Experimental Groups had significant increases in the mental health from it low level to high level when compared with one from the Control Group. This was due to the influence of different packages of yogic practices in the analysis of Experimental Groups. It was interesting to note that the results obtained from Experimental Group II had more significant effect than Experimental Group I and control group on the increased mental health.

These results were found to be in a good agreement with the earlier works done by different researchers. The findings of **Holly, Alexandra and Marian Garfinkel (2010)** investigated the effect of Iyengar yoga was significant changes on mental health of incarcerated women.

TABLE II -COMPUTATION OF ANALYSIS OF COVARIANCE ON PLASMA GLUCOSE (Scores in mg/dl)

Means	Exp Group I	Exp Group II	Control	SV	SS	df	MS	Obtained 'F'
Pre test	99.87	105.13	102.13	B	244.04	2	122.02	1.03
				W	4959.20	42	118.08	
Post test	92.47	92.33	101	B	739.73	2	369.87	4.05*
				W	3839.07	42	91.41	
Adjusted post test	94.56	89.94	101.30	B	967.53	2	483.77	27.45*
				W	722.67	41	17.63	

TABLE II (a)- COMPUTATION OF SCHEFFE'S POST HOC TEST ORDERED ADJUSTED FINAL MEAN DIFFERENCE OF PLASMA GLUCOSE

Control	Experimental Group I	Experimental Group II	MD	CI
101.30	94.56	-	6.74*	3.90
101.30	-	89.94	11.36*	3.90
-	94.56	89.94	4.62*	3.90

Discussion On The Findings Of Plasma Glucose

From these analyses, it was found that the results obtained from the Experimental Groups had significant decreases in the plasma glucose from it higher level to moderate when compared with one from the Control Group. This was due to the influence of different packages of yogic practices in the analysis of Experimental Groups. It was interesting to note that the results obtained from Experimental Group II had more significant effect than Experimental Group I and control group on the decreased plasma glucose.

These results were found to be in a good agreement with the earlier works done by different researchers. The findings of Chinnaswamy (1992) conducted a study on the effect of asanas and physical exercises were reduced the glucose level.

TABLE III -COMPUTATION OF ANALYSIS OF COVARIANCE ON SELF ESTEEM

Means	Exp Group I	Exp	Control	SV	SS	df	MS	Obtained 'F'
Pre test	18.67	17.87	19.27	B	14.80	2	7.40	1.13
				W	276	42	6.57	
Post test	20.93	22.07	19.67	B	43.24	2	21.62	4.75*
				W	191.20	42	4.55	
Adjusted post test	20.89	22.53	19.24	B	77.01	2	38.50	19.71*
				W	80.07	41	1.95	

TABLE III (a)-COMPUTATION OF SCHEFFE'S POST HOC TEST ORDERED ADJUSTED FINAL MEAN DIFFERENCE OF SELF ESTEEM

Experimental	Experimental Group I	Control Group	MD	CI
22.53	20.89	-	1.64*	1.30
22.53	-	19.24	3.29*	1.30
-	20.89	19.24	1.65*	1.30

Discussion On The Findings Of Self Esteem

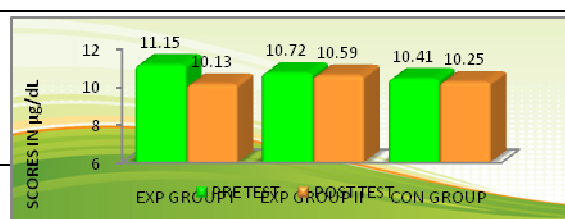
From these analyses, it was found that the results obtained from the Experimental Groups had significant increases in the self esteem from it low level to high level when compared with one from the Control Group. This was due to the influence of different packages of yogic practices in the analysis of Experimental Groups. It was interesting to note that the results obtained from Experimental Group II had more significant effect than Experimental Group I and control group on the increased self esteem. The findings of Hamid, et al., (2014) investigated the effect of yoga training was significantly altered stress and self-esteem and its relation to emotional intelligence.

TABLE IV-COMPUTATION OF ANALYSIS OF COVARIANCE ON CORTISOL

Means	Exp Group I	Exp Group II	Control	SV	SS	df	MS	Obtained 'F'
Pre test	12.12	12.30	11.98	B	0.77	2	0.39	1.01
				W	16.13	42	0.38	
Post test	11.59	11.23	11.82	B	2.63	2	1.31	4.65*
				W	11.85	42	0.28	
Adjusted post test	11.60	11.12	11.93	B	4.76	2	2.38	24.36*
				W	4	41	0.10	

TABLE IV(a)-COMPUTATION OF SCHEFFE'S POST HOC TEST ORDERED ADJUSTED FINAL MEAN DIFFERENCE OF CORTISOL

Control	Exp Group I	Exp Group II	MD	CI
11.93	11.60	-	0.33*	0.29
11.93	-	11.12	0.81*	0.29
-	11.60	11.12	0.48*	0.29



DISCUSSION ON THE FINDINGS OF CORTISOL : From these analyses, it was found that the results obtained from the Experimental Groups had significant decreases in the cortisol from it higher level to moderate when compared with one from the Control Group. This was due to the influence of different packages of yogic practices in the analysis of Experimental Groups. It was interesting to note that the results obtained from Experimental Group II had more significant effect than Experimental Group I and control group on the decreased cortisol.

These results were found to be in a good agreement with the earlier works done by different researchers. The findings of Schell, et al., (1994) conducted a study on physiological and psychological effects of Hatha-Yoga exercise was significant changes on cortisol in healthy women.

CONCLUSIONS: Within the limitations and delimitations set for the present study and considering the results obtained, the following conclusions were drawn: It was concluded that the lipid profile status such as Total Cholesterol, Low Density Lipoproteins, Plasma Glucose, Anxiety has significantly decreased and Mental Health, Self Esteem, High Density Lipoproteins And Cortisol has significantly increased due to the influence of twelve weeks practice of different packages of yogic practices among overweight women compared to the control group due to the influence of twelve weeks practice of different packages of yogic practices among overweight women compared to the control group.

Improving Economy And Performance Of Long Distance Runners

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Abstract

The aim of the study was to investigate the studies in Improving running economy and Performance of long distance runners from JNT University Kakinada, Andhra Pradesh, India have shown that running economy (RE) is the most important variable for long distance runners and sets elite athletes apart in terms of performance. Although other physiological factors are important, such as Strength training, Altitude exposure, Training in a warm to hot environment. Conventional wisdom says it's high aerobic capacity, or Vo₂ Max. But check out the 5 fastest runners at any race, and the winner won't necessarily have the highest VO₂ max. So what's the secret? It's running economy. Key words: Economy, Performance, RE- Running Economy, VO₂- Volume of oxygen,

Introduction

Running economy is a measure of how efficiently a person uses oxygen while running at a given pace. Expressed as the rate of oxygen consumption per distance covered (ml/kg/km), running economy is the energy required running sub maximally at a given velocity. Those who are able to consume less oxygen while running at a given velocity are said to have a better running economy. Running economy takes into consideration one's body mass and oxygen consumption at a steady state within his aerobic range. (Houmard JA, et al., 1991). In distance running, an athlete may attempt to improve performance through training designed to improve running economy. It has been found to be a good predictor of race performance; it has been found to be a stronger correlate of performance than maximal oxygen uptake (VO₂ max) in trained runners with the same values (Saunders, 2004). The literature relating to RE is vast and the determinants of RE supported by empirical data.

A number of variables that may affect running economy, for example vertical motion while running, the ability of the muscles to absorb energy during the shock of landing and transfer it to pushoff, biomechanical factors, technique and type of activity, fitness and training, age, fatigue, gender, race, weight of clothing and shoes, and environmental conditions (Noakes, Tim. 2003 and Daniels JT et al., 1985). Various studies have shown long distance runners are more economical than middle distance runners and sprinters at speeds of 6-12 miles per hour (10-19 kilometers per hour) (Kenney et al., 2012). At those speeds, film analysis has shown that sprinters and middle distance runners have more vertical motion than marathoners.(2).

The main advantage of long distance runners are to maintain the volume of oxygen according to economy. According to The Runner's Body (Rodale, May 2009), the role of VO₂ max has been way overvalued. If athlete wants to run faster and farther, the authors say, athletes have got to improve athlete running economy, or how efficiently athlete body uses oxygen. Like the fuel economy of a car, the less oxygen and energy athlete need to run at a certain pace, the longer athlete can go without ending up, well, gassed. Running economy is the energy demand for the given speed of the runner. Runners who have good running economy use less energy and therefore less oxygen than runners with poor RE at the same speed. As such, there is a strong association between RE and distance performance, with RE being a better predictor of performance than maximal oxygen uptake (VO₂ max) in elite runners (Daniels JT et al., 1985).

Mega-athletes' VO2 max, one of the best indicators of aerobic fitness. VO2 max, or maximal oxygen uptake, indicates the amount of oxygen consumed in milliliters per kilogram of body weight per minute. The higher the number, the more oxygen athlete get to the muscles, and the faster or longer athlete run. The main factors namely Lung ventilation, Oxygen carriage by blood, Oxygen delivery by the heart and oxygen uptake by the tissue. Target's oxygen uptake is a reported 84. At his peak, Armstrong's came in at 85. Norwegian cross-country skier Bjorn Daehlie boasted a 94, the highest ever recorded.(Millet GP et al., 2002).If athlete wants a high VO2 max, choose athlete parents carefully. One group of scientists concluded that heredity determines up to 50 percent of athlete endurance ability. Still, that leaves 50 percent that can be influenced by training. While an outrageous VO2 max isn't the only ticket to running greatness Frank Sorter's and Alberto Salazar's maxes were in the low 70s increasing it can boost athlete race times. A five-point jump, for example, can translate into a seven percent improvement, or 90 seconds for a 20-minute 5-K. And a moderately fit runner can increase VO2 max by as much as 25 percent (Bransford et al., 1977).

Factors affecting running economy:Running economy is influenced by a number of factors, the diagram below includes all major factors affecting running economy.

Method:

Long runners can be the most challenging part of long run training, especially as the efficiency and performance. A Swedish national coach GostaHolmer introduced training methods and adapted it to produce fartlek training in the early 1930's. Fartlek is literally "speed play" with bursts of varying lengths (440m up to 5000m) and intensities injected into a run over natural trains and forests with recoveries varying as well. Fartlek developed great speed endurance and lead to Swedes Haag, Strand and Anderson setting numerous world records..After training again long run was conducted and the result data has been compared with the untrained date conducted from 30 to 90 days by 7 training dynamics.Event 1 has been conducted by 440 X 5 on race pace on day one, day two 3 X 880' near mile pace had been conducted. Day three were scheduled 30 Mt fartlek, 5 X 440 at race pace on day fore, and fifth day were scheduled for off and sixth day has been conducted by long race and seventh day 60 min fartlek respectively.This training dynamic schedule has been conducted for 90 days, and the performance was calculated and tabulated at every 30 days according to training dynamic event.

Figures:1: 4 X 440 Training dynamics performance by five variables

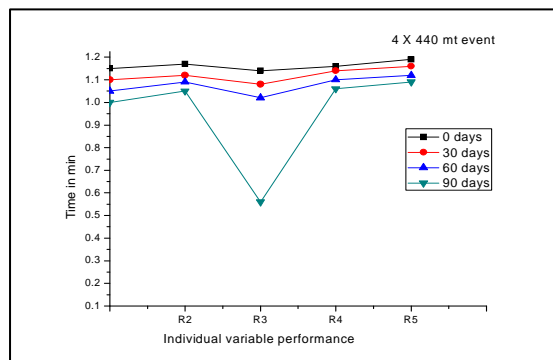


Figure-2: 3 X 880 Mt Training dynamics performance by five variables

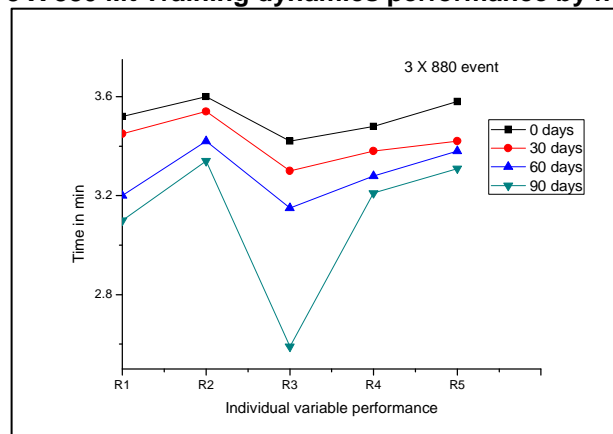


Figure-3: 30 min Fartlek Training dynamics performance by five variables

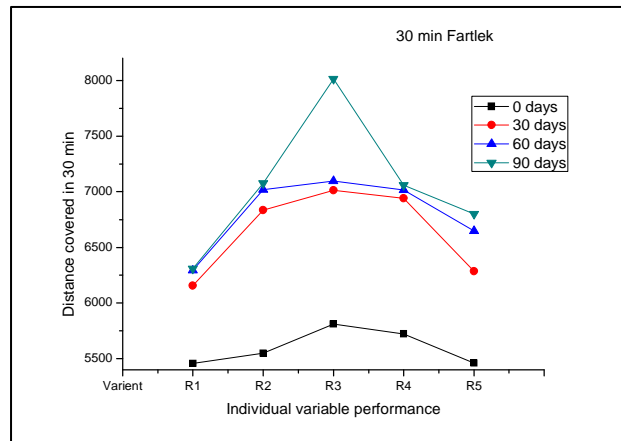


Figure-4: 5 X 440 Mt Training dynamics performance by five variables

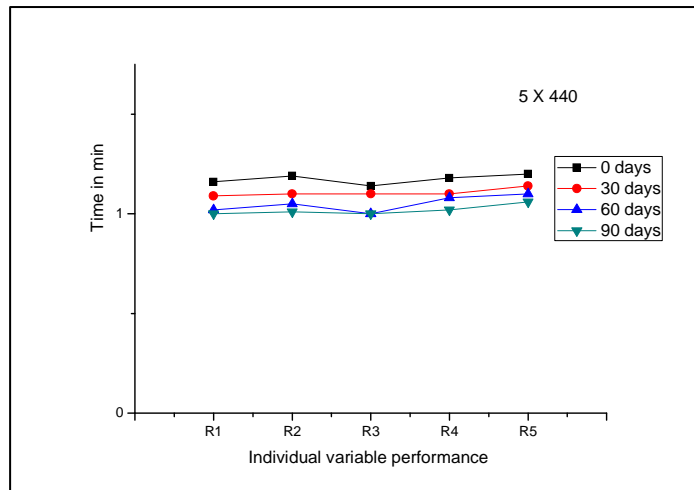


Figure-5: 60 min Fartlek training dynamics performance by five variables

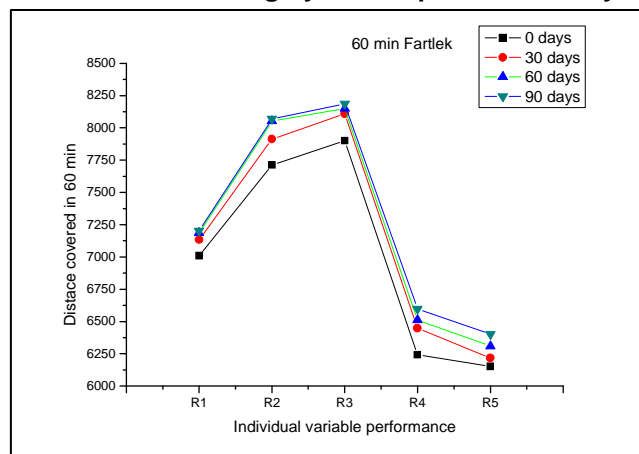
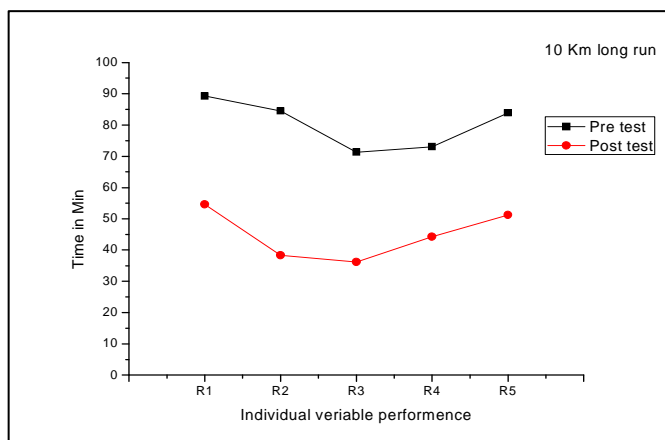


Figure-6: 10 km long run performance of individual variable in pre and post training.



Result and Discussion:

In summary, runners whose focus is to improve times and performance should focus some of their training time on improving their running economy. Running itself will enhance their aerobic capabilities but we have seen in this study that the improvement of performance and economy. (Paavolainen L et al., 1999). In this study five different training dynamics have been performed with five variables (athletes), namely 440 X 5 on race pace , 3 X 880' Mt , 30 Mt fartlek, 5 X 440 at race pace and long race for 60 min after 24 hr off for improving the economy and performance. In five training dynamics all the variables have shown improved performance (Fig 1 to 5). Before training dynamics the 5 selected variables (Athletes) have been tested their performance in 10 km long run and tabulated their respective run times. Similarly after training again all 5 variables have been tested with 10 km long run and tabulated their run time. The long run performance had been observed before training and after training, where it given far better improvement in efficiency and performance as shown in fig 6. Each variable has improved their performance 90 min to 36 min, where it shown that ultimate improvement of economy, performance and VO₂ utilization by the athlete.

Conclusion:

Elite runners have remarkable running economy: they are able to use a minimal amount of oxygen for maximum speed. Like a car that uses the least amount of fuel for the greatest distance, runners with the greatest economy have the best performance. Research shows that intelligent training eliminates wasteful movement and muscle contractions that consume oxygen without moving the runner forward. Here are some of the latest and most innovative training tips to help you maximize the body's use of oxygen fuel. The most effective training for enhancing running economy has shown in this study. The athletes run more the more athlete body learns to move with economy. Evidence shows that novice runners need to put in the hours needed to activate this learning. The best training tip for them is running long distances (440 to 5000 Mt), short distance in limited time and testing exhaust running capability of a athlete at a slow to moderate pace will improve the economy and performance of athlete.

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Comparative study on Vertical Jump Performance of Male Hockey and Football Players

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Abstract

The present study was conducted on 30 male players (fifteen male hockey players; age: 16.80 ± 1.52 years & fifteen male football players; age: 16.13 ± 0.83 years) comprising of inmates of Sports Training Centre, scheme of Sports Authority of India and players training under the guidance of Punjab State coaches in Patiala (India). The experimental protocol developed by Bosco et al., 1983 and Mcguigan et al., 2006 were used to measure the vertical jump performance of male hockey and football players. Test of significance of the differences was applied and data was judged at 0.01 and 0.05 level of significance. The analysis of data shows that the male hockey players performed better in vertical jump test parameters like the squat jump flight time, squat jump height, counter movement jump height, counter movement flight time, Eccentric Utilization Ratio (EUR), Elasticity Index (EI) than male football players. But male football players performed better in continuous vertical jump test (60sec) parameters like Peak Power (0-15sec), Peak Power (45-60sec) and Mean Power (0-60sec), as compared to male hockey players. **Key words:** Vertical jump Performance, Peak Power, Muscular Power.

Introduction

Hockey and football are very dynamic team sports, requiring continuous alterations of intensity and kinetic actions and it is characterized by a great number of side movements, jumps, throws and body contacts all which strictly depend on muscular strength. Coaches and trainers are greatly interested in developing training techniques designed to improve the explosive strength, power performance of the legs and vertical jump ability (Blattner, Stuart 1978). Numerous studies of young athletes indicated that specific training in track and field, gymnastics, swimming, soccer, basketball improve vertical jumping performance, explosive strength of upper and lower limbs. Soccer, (Gorostiaga et al. 2002), basketball (Foley 1988, Klizning, 1991), volleyball (Mills et al. 2005) and tennis training (Huff 1972, Liemohn 1983) improve the explosive strength of lower limbs and consequently vertical jumping performance. During the last few years, performing plyometric exercises in general (Wilt 1978) and drop jumps (Komi and Bosco 1978), also called depth jumps (Wilt 1978), in particular, has become very popular in training. Strength is the ability to produce maximal force, which is considered a basic motor ability and contributes to high performance in most physical activities and sports for prevention of injury (Coyle et al. 1981, Pangrazi 1999). Previous studies have reported that the high performance in many sporting endeavours is characterized by the ability to display high amounts of muscular power. Power is the product of muscular force and velocity or as an instantaneous value during a given movement. The latter, often referred to as peak power (PP), is typically associated with explosive movements such as sprinting, jumping and may be an important variable associated with success in a given discipline. The measurement of Peak Power by strength and conditioning-coaches is an important consideration in the training process. Changes in peak power throughout the annual plan may be indicative of training status or adaptation to the workload and could be used to plan or adjust the training program based on the athlete's performance. The knowledge of mechanical power components of lower extremities of athletes of selected game disciplines can be of great interest for coaches and sport scientists to optimize talent selection in many sports disciplines.

Therefore, the aim of the present study was to compare the vertical jump performance of male hockey and football players.

Material And Method

Thirty male players (fifteen male hockey players; age: 16.80 ± 1.52 years & fifteen male football players; age: 16.13 ± 0.83 years) briefed for the purpose of the study and the experimental protocol (Bosco et al., 1983, Mcguigan et al., 2006) comprising of inmates of Sports Training Centre, scheme of Sports Authority of India and players training under the guidance of Punjab State coaches in Patiala (India). All the risks involved were also explained to each player and voluntary consent was taken from them. Each volunteer was first subjected to physical examination that include measurements of corporal data like date of birth, age, training age, height, body mass and sports discipline. The participants performed an adaptation process previous to the vertical jump test so that error could be minimized.

The vertical jump test measurement system consisted of a portable hand-held computer unit connected to a contact mat (Swift Performance, New South Wales, Australia). It has been previously reported that the system is reliable compared with a force platform (Cronin et al., 2001).

Vertical Jump Tests: Three jumps: Squat jump (SJ), Counter movement jump (CMJ) and Continuous vertical jump Test for 60 seconds (CVJT) were performed according to the experimental protocol (Bosco et al., 1983, Mcguigan et al., 2006).

Explosive strength and endurance variables: In this study, Eccentric Utilization Ratio (EUR) was calculated from vertical jump height (CMJ/SJ) or peak power (CMJ/SJ) by using Sayers et al (1999) peak power formula. Muscle Elasticity index was calculated from the jump height reached in CMJ and SJ Jumps ($CMJ - SJ * 100 / SJ$) (Sayers SP, et al., 1999). The explosive strength and endurance variables were power peak (PP), mean power (MP) and fatigue index (FI). Concerning the CVJT (continuous vertical jump test), the PP was estimated by the mechanical power produced in the first 15 seconds of a 60-second work. The MP was estimated by the amount of work during a 60-second continuous effort. For PP and MP, the results were expressed in watts/kg (W/kg), according to the equation described by Bosco et al. (1983). The fatigue Index (FI) was calculated as the difference between the power peak (work produced in the first 15 seconds) and the mean power generated in the last 15 seconds of a continuous vertical jump work of 60 seconds relative to first 15 seconds peak power. The result was expressed in percentage (%).

Test procedure and data collection: The participants were told to perform a 15-minute routine warm-up before performing the tests through stretching, running, coordination exercises and consecutive jumps (two sets of five vertical jumps). Three squat jumps (SJ) and three counter movement jumps (CMJ) were performed in random order on a jump mat connected to an electronic timer without the aid of an arm swing; this was standardized by having participants hold their hands on their hips. Two minutes rest period between attempts was established. The SJ involved the subject flexing the knee to approximately 90 degree maintaining the position for 3 seconds, and then jumping on the command "go." The CMJ was performed under the same conditions but involved flexion of the knee followed immediately by extension of the legs. Test was executed following the original protocol for both jumps (Sayers SP, et al., 1999). On the next day, again the participants performed a 15-minute routine warm-up before the tests through stretching, running, coordination exercises and consecutive jumps (two sets of five vertical jumps).The participants were told to perform the continuous vertical jump Test (CVJT) during a work performed at maximal effort, with no pauses between jumps for 60 seconds. The subjects were told to keep chest in vertical position, with no excessive advance to avoid influence in the results; as well as to keep knees in extension during the flight, remaining with hands around waist. The participants were given stimulus to jump the highest as possible during the tests.

Statistical Analysis: Mean and standard deviation for all the attributes age, height, body mass and biomechanical transients related to vertical jump tests were calculated. Test of significance of the differences was applied and data was judged at 0.01 and 0.05 level of significance.

Results & Discussion

Table 1. Mean±SD of Age, height & body mass of male Hockey & Football players

Discipline	Statistics	Age (years)	Height (cm)	Mass (kg)
Hockey (N=15)	Mean	16.80	177.87	64.27
	S.D.	1.52	5.82	7.26
Football (N=15)	Mean	16.13	174.40	56.13
	S.D.	0.83	4.36	4.42

Table 2. Shows mean, S.D. and t-value of Vertical Jump performance variables of the three vertical jump tests of male Hockey & Football players

Groups	Statistics	Squat Jump (SJ)		Counter Movement Jump (CMJ)		Continuous Vertical Jump test 60 seconds(CVJT) Mechanical Power (w/kg)					
		JH (cm)	Flight Time (Sec)	JH (cm)	Flight Time (Sec)	EUR	EI	PP (0-15)	PP (45-60)	MP (0-60)	FI
		Hockey	Mean	28.80	0.49	31.73	0.51	1.07	10.65	18.05	13.65
S.D.	4.26		0.04	4.22	0.03	0.05	8.28	3.67	2.57	2.57	13.15
Football	Mean	26.93	0.47	30.00	0.49	1.09	11.88	20.03	13.52	15.96	31.16
	S.D.	5.61	0.05	5.79	0.05	0.05	6.75	4.37	2.63	2.23	13.87
	t-value	0.94	1.08	1.06	1.05	1.06	0.40	1.26	0.14	0.74	1.53

JH - Jump Height; FT-Flight Time; EUR-Eccentric Utilization Ratio; EI-Elasticity Index; PP- Peak Power; MP- Mean Power; FI - Fatigue Index

Statistically non-significant difference was observed between the various vertical jump performance parameters of male hockey and football players.

The Francisco et al., (2010) observed that the average squat jump height 15.8±4.2cm, flight time 357±44.4msec, countermovement jump height 16.9±4.8cm, flight time 369.0±49.9msec and elasticity index 7.1±3.2 for male table tennis players (age 11.32±1.82 years). Whereas in the present study the average value of squat jump height 28.80±4.26cm, flight time 490±40msec for male hockey players & squat jump height 26.93±5.61cm, flight time 470±50msec for male football players, countermovement jump height 31.73±4.22cm, flight time 510±30msec for male hockey players & countermovement jump height 30.00±5.79cm, flight time 490±50msec for male football players was observed. The Eccentric Utilization Ratio (EUR) has been suggested as a useful indicator of power performance in athletes. McGuigan et al., (2006) observed the average value of Eccentric Utilization Ratio (EUR) 1.03±0.20 for male soccer players, 1.00 ±0.17 for softball male players, 1.03±0.20 for football male players & 1.01±0.20 for rugby male players. In the present study the average Mean Power (0-60sec) recorded during the vertical jump test for hockey players was 15.35±2.57w/kg & for football players was 15.96±2.23w/kg whereas Bosco et al. 1983 found that average Mean Power (0-60sec) for school going Boys (age 17.3±0.8 years) was 22.2±1.8 w/kg. Jefferson et al., (2007) found the average Peak Power (0-15sec) 27.76±3.78w/kg, Mean Power (0-60sec) 19.56±2.59w/kg & fatigue index (%) (FI) 48.60±7.01

for male volleyball players (age 19.01 ± 1.36 years). In another study by Jefferson et al., (2006) of the Intermittent vertical jump tests (IVJT) observed the average Peak Power (0-15sec) 24.68 ± 2.70 w/kg, Mean Power (0-60sec) 18.79 ± 2.23 w/kg & fatigue index (%) 57.50 ± 9.51 for the male handball and basketball players (age of handball players 25.74 ± 4.71 years & basketball players 18.60 ± 0.77 years). In the present study the male football players performed better in continuous vertical jump test (60 sec) parameters like Peak Power (0-15sec), Peak Power (45-60sec) and Mean Power (0-60sec), as compared to male hockey players.

Conclusion

The analysis of data shows that the male hockey players performed better in vertical jump test parameters like the squat jump flight time, squat jump height, countermovement jump height, countermovement flight time, Eccentric Utilization Ratio (EUR), Elasticity Index (EI) than male football players. But male football players performed better in continuous vertical jump test (60 sec) parameters like Peak Power (0-15sec), Peak Power (45-60sec) and Mean Power (0-60sec), as compared to male hockey players which may be due to the difference in length of training and effect of specificity of training in particular sport.

Jumping test is possibly a useful tool in evaluating the mechanical power of the leg extensor muscles during explosive stretch-shortening type exercises in hockey and football players. The potential applications are to screen the changes in variables of mechanical power throughout the annual training with the purpose of monitoring the athlete's effectiveness of training and making the adjustments to the training program of individual player, depending on the test results.

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A Study On Mental Ability Of Rural & Urban Female Players

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Abstract

The purpose of the study was to compare the mental toughness between college level rural and urban female team game players. The present study was conducted on a sample of sixty (N=60) female team games players, of age ranging from 19 to 25 years, which includes thirty (N₁=30) players from rural and thirty (N₂=30) from urban colleges, which actually participated in various inter-college competitions of Punjabi University, Patiala, Punjab, INDIA. All the participants were informed about the aim and methodology of the study and they volunteered to participate in this study. Mental Toughness questionnaire developed by Goldberg (1998) was administered for data collection. The independent samples t-test was applied to assess the differences between college level rural and urban female team games players. The level of significance was set at 0.05. Results revealed statistically significant ($p < 0.05$) differences between college level rural and urban female team game players with regard to Rebound Ability, Ability to Handle Pressure, Concentration, Confidence, Motivation and Overall Mental Toughness. Keywords: Mental toughness, rural, urban.

Introduction

Many coaches are becoming aware of the importance of developing mentally tough performers and are designing programs to develop it in their athletes. One of the most significant problems in designing these programs is the inconsistency in the definition and description of mental toughness. Weinberg et al. (2011) concluded that mental toughness is a characteristic, many believe to be important for success in sport; many coaches view mental toughness as a quality that must be considered in the recruitment of athletes. In fact Gould et al. (1987) views it as the most important psychological attribute in determining success. Middlenton et al. (2004) concluded that athletes from a variety of sports and proposed that the mental toughness is strong determination in the face of adversity. Clough et al. (2002) used four C's to describe mental toughness. They have suggested that challenge, commitment, control and confidence are central to mental toughness. While variability among the definitions exists, mental toughness related with the skillful demonstration of collection of psychological skills. Jones et al. (2002) defined mental toughness as the natural or developed psychological edge that enables you to generally cope better than your opponents with the many demands that sport places on a performer. Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure. The training of sports psychology programmes is key to success as Kureger (1984) and Loehr (1982, 86) defined in their studies. Bull et al. (2005) have suggested that the characteristics of mental toughness in a global sense might be distinct from how it is understood in a particular sport. Gould et al. (2002) suggested that mental toughness in Olympic champions plays a significant contributor to sports performance enhancement. Similarly, it is possible that constituents of mental toughness differ in particular sports. No doubt, extensive work has been reported in the area of mental toughness during last decades and the concept has diversified applications in various fields of human activity. But the present study particularly applied on female team game players belongs to rural and urban colleges, which actually is an attempt to explore the possibility of, there could be significant differences between them.

Method

A sample of sixty (N=60) female team game players, of age ranging from 19 to 25 years, which includes thirty (N₁=30) players from rural and thirty (N₂=30) players from urban colleges, which actually participated in various inter-college competitions of Punjabi University, Patiala, Punjab, INDIA. All the participants were informed about the aim and methodology of the study and they volunteered to participate in this study. Mental toughness was measured by applying mental toughness questionnaire developed by Goldberg (1998), which consists of 30 items measuring the mental toughness in five areas. Data was analyzed using SPSS Version 16.0 (Statistical Package for the Social Sciences, version 16.0, SPSS Inc, Chicago, IL, USA). Independent samples t-test was used to test if population means estimated by two independent samples differed significantly. The level of significance was set at 0.05.

Analysis Of Data

Table-1. Mean values (\pm SD), standard error difference of the mean and test statistic t of Mental Toughness between college level Rural and Urban female team game players.

VARIABLES	Rural (N ₁ = 30)		Urban (N ₂ = 30)		Mean Difference	SEDM	t-value	Sig.
	Mean	SD	Mean	SD				
Rebound Ability	3.27	0.98	3.87	0.82	0.6	0.23	2.572*	0.013
Ability To Handle Pressure	4.37	0.93	3.67	0.84	0.7	0.23	3.056*	0.003
Concentration	3.70	0.79	4.20	0.66	0.5	0.19	2.645*	0.011
Confidence	4.37	0.72	3.77	1.01	0.6	0.22	2.658*	0.010
Motivation	4.23	0.93	3.50	0.78	0.73	0.22	3.304*	0.002
Mental Toughness (Total)	19.97	1.97	19.00	1.68	0.97	0.47	2.042*	0.046

*Significant at 0.05 level

Table 1 presents the mean scores of college level rural and urban female team game players with regard to Mental Toughness. The rural female team game players when compared to urban, have exhibited significant ($p < 0.05$) differences with regard to Rebound Ability, Ability to Handle Pressure, Concentration, Confidence, Motivation and Overall Mental Toughness.

Findings

Findings of the present study showed that rural female team game players have exhibited statistically significant better with regard to ability to handle pressure, confidence, motivation and mental toughness (total), when compared to urban female team game players. However, urban female team game players have exhibited statistically significant better with regard to rebound ability and concentration than their counterpart; rural female team game players. Present research findings are partially in line with the study of Singh, J. et al. (2012), they concluded that there was significant differences between foreigner professional footballers and Indian non-professional footballers on the account to rebound ability, ability to handle pressure, confidence, motivation and mental toughness (total). Ramesh Chand Yadav (2014) also revealed in his study that mental toughness of national female volleyball players is higher than the national female kabaddi players. Rajender Singh and Rajesh Kumar (2011) concluded in their study that All India intervarsity soccer players exhibited significantly differed in mental toughness than their counterpart; inter-collegiate soccer players.

Conclusion

It is concluded that statistically significant differences were found between rural and urban female team game players with regard Rebound Ability, Ability to Handle Pressure, Concentration, Confidence, Motivation and Overall Mental Toughness. The rural female team game players had greater Ability to Handle Pressure, Confidence, Motivation and Overall Mental Toughness than urban female team game players. However, urban female team game players exhibited significantly better in respect to Concentration and Motivation than rural female team game players

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Key Success Factors Of Muaythai Gyms Business Development for Cultural Tourism

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Abstract

This research aims to study key success factors of Muaythai gyms business development for cultural tourism and adopt the guidelines of Muaythai gyms business development for cultural tourism. This research was categorized as qualitative research. All data were collected by using Delphi Technique. The interviews comprise of 5 groups samples as follows; tourism expert, sports business expert, culture expert, boxing competition organizing expert and head of Muaythai gyms expert. The research results are summarized that there are 8 key success factors of Muaythai gyms business development for cultural tourism as follows 1) Man, head of Muaythai gyms who is professional executive and has good boxer's managing skills and ability to continuously find competitors 2) Money, which has to be made systematic revenue-expense account 3) Material, which has to reach standards of boxing stage 4) Management, which has to be linked Information Technology (IT) and knowledge both in Thailand and abroad 5) Products, which have to be trained Muaythai for exercising and competition 6) Price, which has to be set the appropriate service price for improving the quality of product 7) Place, which has to be conducted associates of Muaythai network both in country and foreign countries and 8) Promotion, which has to be produced media or tools for continuously advertising and supporting Muaythai to be include in the Olympic Games. And the guidelines of Muaythai gyms business development for cultural tourism from MMTTL approach includes of 5 ways as follow; 1) Management 2) Marketing mix 3) Trust 4) Technology and 5) Leadership.

Keywords:Key success factors, Muaythai Gyms, Cultural tourism

Introduction

Muaythai is science and art on defense of Thais. There are evidences of revolution since Suvannabhumi era and obviously revealed in Dvaravati era, and flourish in Sukhothai, Ayutthaya, Thonburi and Rattanakosin eras. Muaythai is the martial art in term of sport which is useful and essential for personal, community and country. (Department of Cultural Promotion, 2012)

Currently, trend of sport business conduction for entertainment affects Muaythai to be high popular both in country and abroad. Foreigners could be able to perceive MaeMai Muaythai, the art of self-defense and Thai manners. (UNESCO Bangkok, 2017) Moreover, OngBak movie which has JaaPhanomYeerum who is actor adopted Muaythai as a self-defense art and BuaKhaoPor.Pramook who is reputed of Muaythai art. (Box Office MOJO, 2017) Furthermore, numerous Muaythaigyms could be able to make reputation and acceptance in Thailand and other countries such as Fairtext Muaythaigyms, Sit Song Pee Noong Muaythaigyms, Sasiprapa Muaythai gyms, Chareon Thong Muaythaigyms etc.

Muaythaigyms development is a human resource of the boxing. There are employments, earning revenue and the source of dissemination for cultural tourism which leads to conservation of Muaythai, the significant upstream to sustain Muaythai. (Sports Authority of Thailand, 2012) It was found that Muaythaigyms business recently lack of system management standard. When it is developed to be the business that there are lacking of budget and getting debt, affect to boxers development in the gyms. Nevertheless, the dissemination of Muaythaigyms business development for cultural tourism, the business management of accommodation, hotel and resort will be able to make revenue with Muaythai gyms and earn more revenue to Thailand approximated more than hundred million Baht. There are challenges of encouraging income and distribution channel, and conservation of Thai art. (Department of Tourism and Sports, 2017)

Objective of the research

The purpose of this study was to study key success factors of Muaythai gyms business development for cultural tourism and adopt the guidelines of Muaythai gyms business development for cultural tourism.

Literature review

Key factors should be done to achieve the success is the concretely main goal to connect with implementation in every level to move on to the same direction. It makes operators and executives of the organization realized what they have to do to get the achievement, respond to the vision. Without the key success factors, the vision of the organization will not be responded effectively. (Department of Industrial promotion, 2012)

Henri Fayol (1917) mentioned to the cores of management, comprises with 14 aspects afterward it was developed to 4Ms principle which are Manpower, Money, Materials and Management. Phillip Kotler and Kevin Lane Keller (2011) mention that marketing components are following (1) Product comprises with Product variety, Quality, Design and features, Brand name, Packaging, Sizes, Services, Warranties as well as returns in case of customer dissatisfaction (2) Price includes list price, discounts, allowances, payment period and credit terms (3) Place consists with Channels, coverage, assortments, locations, inventory and transportation (4) Promotion composes with Sales promotion, Advertisement, Sale force, Public Relations and Direct marketing.

Travelling for education, appreciating art and cultural, festival, visiting monuments, studying custom of local community, as well as faith of religion are attractive compositions for cultural tourism. SiripenYimjanya and Kelvin Wongleedee (2014) mentioned to factors of attractive promotion and selective decision of foreigners to travel in Thailand are 1) Finding experiences 2) Thai Foods 3) Learning cultures 4) Relaxing 5) Learning new things 6) Studying new cultures 7) Escaping the old things 8) Participating activities 9) Adventuring and 10) Good weather. No. 8th of popular activities ranked in Thailand is short-period course (7-14 days) of Muaythai training which implied to the trend of doing activities together with travelling.

Methodology

Research tools of this study using Delphi Technique are following below;

1. None-constructed questionnaire to ask initial opinion about problems, and key success factors of Muaythai gyms business development for cultural tourism.
2. Questionnaires to ask experts on key success factors of Muaythai gyms business development for cultural tourism by using Delphi Technique including 2 sets following;
 - 2.1 Opened-end questionnaire (first round) is to express expert opinion about key success factors of Muaythaigyms business for cultural tourism
 - 2.2 Second round questionnaire is Rating Scale with 5 levels of Likert Scale that all questions adopted from the expert answers of the first round opened-end questionnaires
 - 2.3 Third round questionnaire is also Rating Scale with 5 levels by sending to the same experts who have done the previous questionnaires. It was the same to second round questionnaire but researcher presented percentage, average, mode, median, range between Quartile and Answering position of the last questionnaire.

Population and Group Sample

Population of this research comprises with the 18 experts who have educational qualifications, and experiences related to tourism, sport business, culture and Muaythai competition organization, who entrepreneur of famous Muaythaigyms where the great number of foreigners coming to learn, concluding below;

1. Tourism expert 1 person 2. Sports Business expert 4 persons
3. Boxing competition organizing expert 2 persons
4. Culture expert 1 person 5. Head of Muaythai gyms expert 10 persons

Data collection

Delphi technique was applied for data collection and used in the research for tool construction and data analysis between the periods of January 2015 to January 2016

Scope of the research

10 Muaythai gyms business where have foreigners attending the training course and possibility for launching the cultural tourism business by Purposive sampling

Result of the research

Key success factors of Muaythai gyms business development for cultural tourism .

Table 1 Analysis result of expert's opinions according to key success factors in Muaythaigyms business development for cultural tourism from the questionnaires (Combined number)

No.	List	Average	Mode	Median	Range between Quartile	Acceptance of Experts (Percentage)
1	Man	3.58	4.42	4.09	1.06	52.03
2	Money	3.86	4.00	3.09	1.04	54.75
3	Material	3.79	3.85	3.76	1.40	50.28
4	Management	3.72	4.08	4.16	1.20	56.00
5	Product	4.21	4.12	4.25	1.06	55.55
6	Price	4.09	4.33	4.16	1.16	51.85
7	Place	4.16	4.17	3.57	0.46	68.53
8	Promotion	4.27	4.00	4.50	0.88	56.47

Table 1 shows that each aspect has each key success factors of Muaythaigyms business development for cultural tourism following;

Aspect 1 is Man that it should have Muaythaigyms leader who is professional executive with knowledge and interested in Mae Mai Muaythai and have good manager who has ability in training planning and continuously & properly seeking peer for competition,

Aspect 2 is Money (Revenue and Expense) that it has to make systematic revenue-expense account and conclude annual balance.

Aspect 3 is Material that it should have standard boxing stage.

Aspect 4 is Management that it has to be properly linked the network of Information Technology (IT) and Knowledge Management (KM) in the country and other countries.

Aspect 5 is Product that Muaythaigyms have to train as the Muaythai use the useful time for exercising to reduce the stress from working and lead to rehearsal for competition.

Aspect 6 is Price that it should be set the appropriate service price for improving the quality of product.

Aspect 7 is Place that it has to be conducted associate of Muaythai network regarding culture both in country and foreign countries.

Aspect 8 is Promotion that it should be produced media or tools for continuously advertising such as Posture, Pamphlet, Website, Brochure, Radio spot, Television. Moreover, government should support containing Muaythai into Olympic Games.

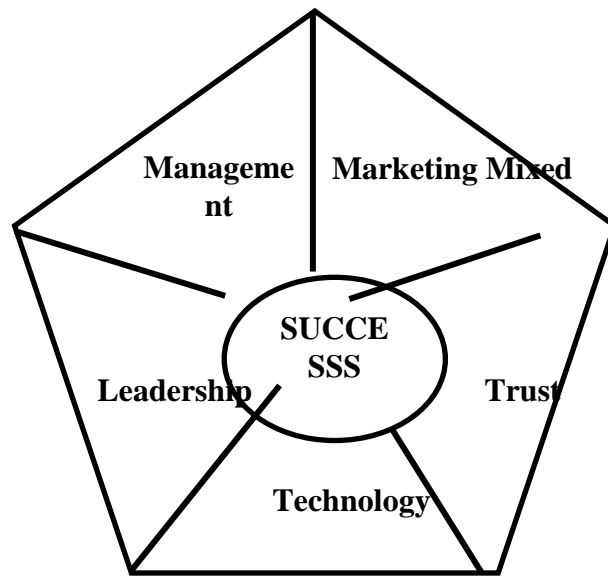


Figure 1 The guidelines of key success factors of Muaythai gyms business development for cultural tourism.

The content is offered is meaning. **MMTTL Model**

- M: Management
- M: Marketing Mixed
- T: Trust
- T: Technology
- L: Leadership

Discussion

Management Muaythaigyms business development for cultural tourism business, management of professional Muaythaigyms have to be started from liking/affection in Mae Mai Muaythai art that it is a personal feeling or a heritage pass down from ancestor without any obvious agency, identified organization structure, source of budget, non-conducting the revenue-expense accounting system. It is therefore looked as gamble instead. Some of boxing gyms are rental type and at own house or own area, and materials are non-matching standards however it can be also practical. Some gyms follow the standards because they get service charge from foreigners.

Proposed approach is that the management should be including 1) Manpower who has professional administrative skill and the knowledge of Mae Mai Muaythai art 2) Money which comprises of recording revenue-expense account on period, having finding skills of sport sponsors and VIK with annual planning or following clearly competition schedule to obtain enough revenue 3) Material which meets international standard with good clean, safety and maintenance 4) Management which has managing system instead of isolated working and explicit distributing responsibility based on position or scope of work.

Marketing mixed Muaythaigyms development for cultural tourism business in combined marketing mixed, previously there was no obvious marketing mixed emphasized on the competition and no emphasized on customer motivation of brand construction. Good image construction is also valuable interesting point for encouraging more business investors or large and small sponsors. Furthermore, second half of the period superstars and singers become interested in the boxing and exercising to fast lose weight and build the muscle so it becomes the trend of exercising which is high popular currently.

Proposed approach is that it should be considered in 4 aspects of market promotion following;
Product that boxing gyms have to contain of the boxing training for health and competition.
Pricing should be set the appropriate service price for improving product quality.
Place has to be built associate of Muaythai related to culture both in country and foreign countries.
Promotion should be released through media and tools which are continuously used in advertisement and public relation.
For example, superstar, actors, singers and famous people were taken to be presenter for new image presenting of Muaythai for interest attraction and creating concept of exercising activity however Muaythai is the exercising activity which is Thai cultural conservation and self-defense, moreover it is Thai art that marketer could be able to adopt value for gyms aiming to promote greatly value added.

Trust Muaythaigyms for cultural tourism, trust of Muaythai could be built previously by foreigners travelled to Thailand and wanted to study Muaythai that it is as Thai art. Nevertheless, the Muaythai gyms did not meet the standard that it makes less reliability of Thailand, some groups become to launch Muaythaigyms for tour package selling with foreigners in short-period of the training course. However, the foreigners received the service lower than their expectation that it was not valuable with purchasing.

Proposed approach is that government or related organizations such as Office of Boxing Board who regulates, controls 7 types of people regarding the boxing including (1) boxer (2) coach (3) judge (4) Muaythaigyms leader (5) promoter (6) head of boxing stadium and (7) boxer's manager who has to transfer knowledge and understanding among stakeholders following Muaythai standards, and contribute on gyms sign for boxing gyms leader to submit for checking and evaluating to meet Muaythai standards. Finally, it is the approval by document for the gyms achieved the standard and certificated by government.

Technology Muaythai gyms business development for cultural tourism in term of technology, there are renowned and long history with word of mouth without recording or explicit writing, and there are different type of Muaythai history based on each region e.g. Muay Ta Sao, MuayChaiya, MuayKorat, MuayLopburi, Physical education boxing. These are diverse fighting styles which cause interested people could not clearly understand or hesitate which have ever heard before. Furthermore, it is very difficult to reach as well as there is no example or illustration with description or photograph or obvious animation picture for education, moreover there is very less dissemination in Technology system resulted less perception and reach ability.

Proposed approach is that government or related organizations such as Board of Boxing Sport has to compile knowledge and disseminate Muaythai frequently, conduct diverse and reachable distribution channels e.g. broadcasting through up to date and completely medias of free TV, digital TV, website and application that it could be able to attract interested people for self-learning and getting training course in standardized Muaythaigyms. Moreover, Muaythai could be adjusted perception from gamble to self-defense art which is valuable as the heritage of Thailand.

Leadership Muaythaigyms development for cultural tourism business in term of leadership, the history of Muaythaigym's owner is from personal passion without truly seeking leader of the organization and sometimes it seems like monopoly of the founder with less or no change that they are afraid to loss their power or conflict of interests. It causes followers could not express their opinions or exactly recognize their leader efficiency. Proposed approach is that gyms leader has to accept the changes and be ready to develop own ability properly with current situation or realize the changed trend and be able to handle with changed situations, as well as apply their ability and study the good/ appropriate prototype information with suit for their organization.

Suggestions for the research

1. There are limitations in investigating the other related researches, collecting knowledge regarding to this research. It was found that there are fewer researchers who studied in-depth information and the contemporary research did not match to professional Muaythaigym's standard. Therefore, it should be consulted with experts on language and Muaythai field, sport business and academician regarding to the boxing to compile the knowledge for further study and reference.
2. The guideline of Muaythai gyms management should be produced for promoting cultural tourism to disseminate to other Muaythaigyms for further applying 8 aspects correctly and effectively.
3. Sports Authority of Thailand, Ministry of Tourism and Sports should apply these aspects of this research to push up division of professional sports and boxing conducting strategic plan and implementation plan to effectively manage for sustainable development.
4. For further research, it should be properly studied on Promotion approach of Muaythai to international countries in Olympic Games that the approaches and guidelines will be forced for organization establishment and international competition with systematic linkage.

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Sports Commitment Of National Football Referees Of South India

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Abstract:

Referees are potentially among the most influential people in a football match. The impact a match has is psychologically, physically, and emotionally endured by the referee. 52 National Football referees on the national panel of AIFF were considered. One way Anova was used to analyze the data. The study examined the Sports commitment of National Referees from different states of South India. The factors of Sports Commitment Model that are Enjoyment, Involvement Alternatives, Personal Investments, Social Constraints, Involvement Opportunities predicts the referees commitment. Social Constraint factors like would let down family ($p > 0.171$), colleagues ($p > 0.26$) and would be considered quitter ($p > 0.22$) along with Involvement Alternatives factors like avenues other than officiating provided fun ($p > 0.183$) interesting ($p > 0.199$) and Enjoyable ($p > 0.113$) emerged as the dominant factors of National Referees Commitment to officiating. Key Words: Sports Commitment, National Football Referees, South India

Introduction

The world of sports today has become a global business entity. Everybody involved starting from the players, coaches, supporting staff to the referee, have dedicated themselves to the modern demands of the game. Football is a major sport in the world where the players never mind evading the provisions under the laws of the game. The Referees are the guardians and fulcrum of the game, who uphold the laws of the game. Refereeing no doubt is tough and challenging, but on occasions a referee asks himself, 'Why am I doing this?' Is the risk worth taking? Add to it constant harassment and physical abuse hurled at the referees by players, coaches and spectators. A referee needs to be dedicated, committed, have strong work ethics and belief in oneself to achieve the goal and excel. The referees sometimes get so embroiled with negative thought, that they forget why they choose officiating at first instance. An individual decides to keep refereeing based on his past experience and passion to give back something to the sport which has earned him name and fame in the society. This backdrop in mind the research scholar wants to know the various factors that keeps the referee going, the commitment that drives him to accomplish the task. The Objectivity of this study is to examine sport commitment among National Football Referees of South India.

Delimitations

The Sports commitment for this study was assessed by administration of the Sport Commitment Model (Scanlan, et al., 1993).

The study is delimited to National football referees from the states of Karnataka, Tamil Nadu, Kerala and Andhra Pradesh.

Limitations:

The referees involved in the study were from outdoor sports. The referee's participation in the study is purely voluntary in nature.

Hypothesis

There is significant difference in commitment towards officiating among National football referees of South India.

Methodology And Procedure

The procedures adopted to gather and analyze the data is presented below.

Selection of the subjects and Sample size for the study 52 National referees from State Association of Karnataka, Tamil Nadu, Kerala & AP

Testing Instruments for collection of data and Procedure

The data for this study comes from 17-item Sport Commitment Model (SCM; Scanlan et al., 1993a;) on the 5-point Likert-type format from Strongly disagree (1) to Strongly agree (5) to assess the level of commitment among National Referees of AIFF.

ANALYSIS OF DATA

Table 1: Descriptive Statistics and Anova

FACTORS	STATEMENTS (VARIABLES)	MEAN	SD
SPORTS ENJOYMENT	Do you enjoy refereeing in soccer?	4.79	0.457
	Are you happy with refereeing in soccer?	4.71	0.572
	Do you have fun refereeing in soccer?	3.87	1.010
	Do you like refereeing in soccer?	4.79	0.457
INVOLVEMENT ALTERNATIVES	Compared to refereeing in soccer, there are other things I find more interesting.	2.75	1.186
	Compared to refereeing in football, there are other things I could do that would be more enjoyable.	2.50	1.111
	Compared to refereeing in soccer, there are other things I could do that would be more fun.	2.77	1.231
PERSONAL INVESTMENT	How much of your time have you put into refereeing in soccer?	4.13	0.768
	How much effort have you put into refereeing in soccer?	4.31	0.643
	How much of your own money have you put into refereeing in football?	3.73	0.689
SOCIAL CONSTRAINTS	I feel I have to officiate soccer so that people don't think I'm a quitter.	3.71	1.160
	I feel I would let my friends and colleagues down if I stopped refereeing in soccer.	2.67	1.279
	I feel I would let my family down if I stopped refereeing in soccer.	3.02	1.336
INVOLVEMENT OPPORTUNITIES	Would you miss being a soccer referee if you left officiating?	3.81	1.329
	Would you miss your colleagues (e.g., friends) if you left officiating?	3.75	1.312
	Would you miss the good times you had refereeing in soccer, if you left?	4.08	0.737
	Would you miss the players if you left officiating?	3.69	0.940

Table 1: Sports Enjoyment emerged as the dominant predictor of commitment among the National Referees from South India. These results are in consistent with the literature on the sources of sport enjoyment (e.g., Scanlan, et al., 1993;) The results show that enjoyment can be derived from intrinsic sources (e.g., progress, competence) and extrinsic sources (e.g., relatedness, colleague's support)

Table 2: Mean Difference of Sports Enjoyment of National Referees of different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KAR	TN	KER		
	Mean \pm SD				
Do you enjoy refereeing in soccer?	4.85 \pm 0.376	4.75 \pm 0.532	4.80 \pm 0.414	0.187	0.830
Are you happy with refereeing in soccer?	4.62 \pm 0.506	4.71 \pm 0.690	4.80 \pm 0.414	0.355	0.703
Do you have fun refereeing in soccer?	4.31 \pm 0.630	3.46 \pm 1.179	4.13 \pm 0.743	4.186	0.021
Do you like refereeing in soccer?	4.62 \pm 0.506	4.83 \pm 0.482	4.87 \pm 0.352	1.279	0.287

In the Table: 2, there is significant difference in the mean values towards liking and fun felt by officiating and there is no significant difference in the mean values of happiness and enjoyment felt by the referees of different states while officiating.

Table 3: Mean Difference of Involvement Alternatives of Referees from different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KAR	TN	KER		
	Mean \pm SD				
Compared to refereeing in soccer, there are other things I find more interesting.	2.691 \pm 1.251	2.50 \pm 1.251	3.20 \pm 0.941	1.671	0.199
Compared to refereeing in football, there are other things I could do that would be more enjoyable.	2.23 \pm 0.832	2.33 \pm 1.204	3.00 \pm 1.069	2.278	0.113
Compared to refereeing in soccer, there are other things I could do that would be more fun.	2.85 \pm 1.281	2.46 \pm 1.318	3.20 \pm 0.941	1.761	0.183

In the Table: 3, there is significant difference in the mean values felt by the referees from different states in the Involvement Alternatives.

Table 4: Mean Difference of Personal Investment of National Referees from different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KAR	TN	KER		
	Mean \pm SD				
How much of your time have you put into refereeing in soccer?	4.15 \pm 0.801	4.07 \pm 0.908	4.27 \pm 0.458	0.392	0.678
How much effort have you put into refereeing in soccer?	4.38 \pm 0.650	4.33 \pm 0.702	4.20 \pm 0.561	0.314	0.732
How much of your own money have you put into refereeing in football?	3.62 \pm 0.768	3.71 \pm 0.690	3.87 \pm 0.640	0.476	0.624

In the Table: 4, there is no significant difference in the mean values felt by the referees from different states in the Personal Investment.

Table 5: Mean Difference of Social Constraints of National Referees from different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KAR	TN	KER		
	Mean \pm SD				
I feel I have to officiate soccer so that people don't think I'm a quitter.	3.23 \pm 1.092	3.83 \pm 1.129	3.93 \pm 1.223	1.555	0.221
I feel I would let my friends and colleagues down if I stopped refereeing in soccer.	2.23 \pm 1.235	2.46 \pm 1.250	3.40 \pm 1.121	3.9460	0.026
I feel I would let my family down if I stopped refereeing in soccer.	2.62 \pm 1.387	2.62 \pm 1.472	3.53 \pm 0.915	1.834	0.171

In the Table: 5, there is significant difference in the mean values felt by the referees from different states in the Social Constraint.

Table 6: Mean Difference of Involvement Opportunities of National Referees from different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KAR	TN	KER		
	Mean \pm SD				
Would you miss being a soccer referee if you left officiating?	3.62 \pm 1.609	3.63 \pm 1.408	4.27 \pm 0.799	1.271	0.290
Would you miss your colleagues (e.g., friends) if you left officiating?	3.54 \pm 1.664	3.71 \pm 1.268	4.00 \pm 0.768	0.444	0.644
Would you miss the good times you have had refereeing in soccer, if you left?	4.23 \pm 0.927	3.92 \pm 0.717	4.20 \pm 0.561	1.063	0.353
Would you miss the players if you left officiating	3.69 \pm 1.032	3.79 \pm 0.779	3.53 \pm 1.125	0.339	0.714

In the Table: 6, when we consider individual factors of there is significant difference in the mean values towards the good times and intent to quit felt by the referees and no significant difference if they missed their colleagues and left officiating by the referees from different states.

Results and Discussion :For investigating the perceived organizational support among the national referees, one way anova was applied, from the above tabulated data, we can say that there is significant difference in the various factors of commitment among National referees. Social Constraint emerged as the dominant factor among the Sports commitment model. The National referees felt that they would let down their family ($p > 0.171$), Colleagues ($p > 0.026$) or people might think him as quitter ($p > 0.22$), if they left officiating. Similarly Involvement Alternatives also emerged as dominant factor of Sports commitment among National referees, Compared to officiating, the National referees felt other avenues provided them with more fun ($p > 0.183$), interesting ($p > 0.199$) and Enjoyable ($p > 0.113$). There is significant difference in the factors of Sports Commitment Model.

Conclusions:The study gives an insight about the factors that influence referee's decision to continue officiating in football. There is significant difference in the factors of social constraint and Involvement Alternatives implying they think at avenues other than officiating as an option and they need to officiate for the sake of his family, colleagues and label of being branded quitter keeps the National referees continue officiating.

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Selected Anthropometric Variables As Predictors For Performance Of Basketball Players.

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Abstract:

The Purpose of this study was relationship among Anthropometric measurements and Basketball player's performance. The 82 male Basketball players were selected from Senior Inter District Level representation in Andhra Pradesh on non-randomly by purposive sample was used. Karl Pearson Coefficient of Correlation was used to Analysis of the collected data on Anthropometric measurements are Height(0.585*), Sitting Height(0.259*), Weight(0.364*), Palm Span(0.239*), Arm Length(0.462*), Forearm length(0.299*), Hand Length(0.379*), Leg Length(0.627*), Foot Length(0.279*), Chest Circumference (0.397*), Wrist Circumference(0.473*), Thigh Circumference(0.313*), Calf Circumference(0.271*), Shoulder Diameter(0.573*), Hip Diameter(0.251*), Abdominal Circumferences(0.271*) Coefficient of Correlation with Basketball players performance was positively with Significant level 0.05. Remaining Anthropometric measurements not correlated on this current study. Key words: Anthropometric, Variables, Basketball, Performance.

Introduction:

The Game of Basketball is very complicated in terms of skills and team work. Basketball is an Aerobic-based Anaerobic Sport (Delextrat and Cohen, 2009 and Meckellet al., 2009) which requires High Intensity activities such as Jumping turns, Dribbles, Sprints, Screens and Low Intensity activities such as walking, Stopping and Jogging. Frequent Stoppages in Games allow players to recover between bouts of activity, Thus, Allowing repeated High-Intensity spells of play (Drinkwater et al., 2008). In this game, everyone should mastery over fundamental skills like Dribbling, Passing, Shooting, Rebounding, Defense...etc. When one has mastered the fundamental skills of the games, he gets a feeling of well-being. High level of performance otherwise known as playing ability in Basketball depends upon proficiency over the fundamental skills. High level of performance of a basketball player depends upon fundamental skills. It is recognized that among the fundamentals, ability to dribble the ball, ability to shoot, ability to passing, ability to rebounding, ability to shoot are of primary importance for high level of performance.

Basketball is a fast-moving game and most popular sports in the world and one of the most widely viewed (Scott, 2013). Basketball is played by both men and women of all ages and fitness level. Successful game of Basketball needs ability of the players to generate good footwork, agility and tremendous power during the play of game. Skills like Dribbling, Shooting and Passing are of utmost importance for a player at any level of play (Thani, 1997).

The first step for training is to determine personal needs. The second step is to find a training program to meet those needs. This requires a "Needs Analysis" and the development of training goals. Participation on a systematic and well-designed Basketball training programme to improve muscle strength levels (Trimaraset al., 2009). In order to improve the basic Physical components,

Specific training procedures should be incorporated during the Basketball training sessions (Vamvakoudiset al., 2007). Skill-based conditioning games offer a specific training stimulus to stimulate the Physiological demands of competition and combination training and skill-based conditioning games is likely to confer the greatest improvements in fitness and skill in junior elite players (Santos and Janeira, 2012).

Training and conditioning are the best-known ways, to prepare the players for efficient performance and healthful living. Efficient performance is possible only through a carefully planned programme of progressive practice which will perfect the co-ordination, eliminate unnecessary movements and accomplish result at the expense of minimum energy as well as conditioning the muscle structure and the circulation to withstand without harming the intensive demands made upon them.

Fitness is the ability to meet the demands of a physical task. Basic fitness can be classified in four main components: Strength, Speed, Stamina and Flexibility. However, Exercise Scientists have identified nine components that comprise the definition of fitness: Strength, Power, Agility, Balance, Flexibility, Local Muscle Endurance, Strength Endurance and Co-ordination. All the Nine Elements of fitness Cardiac Respiratory qualities are the most important to develop as they enhance all the other components of the conditioning equation.

Methodology

Purpose of the Study: This study was to decide to the Anthropometric measurements relation with Basketball player's performance.

Selection of the Subjects: 82 male Basketball players were selected from Senior Inter District Level representation in Andhra Pradesh on non-randomly by purposive sample same was used.

Figure-I : Selection of the Anthropometric Variables

S.No	Anthropometric Variable	Equipment	Criterion Measures
1	Height	Stadiometer	Centimeter
2	Sitting Height	Anthropometric Rod	Centimeter
3	Weight	Weighing Machine	Kilograms
4	Palm Span	Flexible Tape	Centimeter
5	Arm Length	Flexible Tape	Centimeter
6	Forearm Length	Flexible Tape	Centimeter
7	Hand Length	Flexible Tape	Centimeter
8	Leg Length	Measuring Scale	Centimeter
9	Foot Length	Flexible Tape	Centimeter
10	Chest Circumference	Flexible Tape	Centimeter
11	Wrist Circumference	Flexible Tape	Centimeter
12	Thigh Circumference	Flexible Tape	Centimeter
13	Calf Circumference	Flexible Tape	Centimeter
14	Shoulder Diameter	Flexible Tape	Centimeter
15	Hip Diameter	Flexible Tape	Centimeter
16	Abdominal Circumference	Flexible Tape	Centimeter
17	Ponderal Index	Flexible Tape	Centimeter
18	Crural Ratio	Flexible Tape	Centimeter
19	Hand Circumference	Flexible Tape	Centimeter
20	Foot Breadth	Flexible Tape	Centimeter

Collection of the Data and Tools

The Data was collected by Adminstrating the standard procedures for taking Anthropometric measurements as well as Basketball player's performance and tools were used weighing machine for Weight, Stadiometer for Height and Flexible measuring tape for Lengths, Diameters and Circumference measurements. The Score is recorded weights in kegs and remaining the nearest one tenth of the centimeters.

Performance of Basketball Players

Johnson Basketball skill tests were considered as performance of Basketball players.

Johnson Basketball Skill Test Items:

(1). Filed Goal Speed Test. (2). Basketball Throw for Accuracy. (3). Speed Dribble Test.

Statistical Analysis and Discussions

In order to find out the relationship of Anthropometric measurements with Basketball performance with the Karl Pearson Coefficient of Correlation is used and testing the Hypothesis the level of confidence is 0.05.

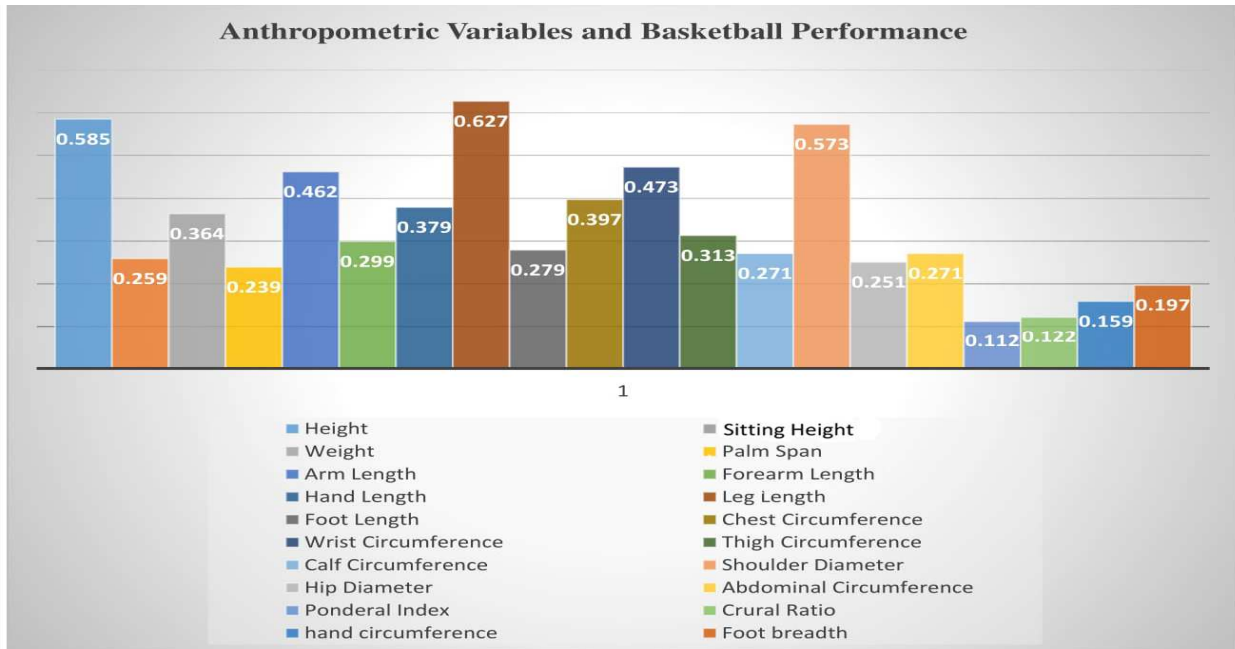
Figure-II:Anthropometric measurements association with Basketball playing performance

S.No	Anthropometric Variable	Coefficient Of Correlation 'r'
1	Height	0.585
2	Sitting Height	0.259
3	Weight	0.364
4	Palm Span	0.239
5	Arm Length	0.462
6	Forearm Length	0.299
7	Hand Length	0.379
8	Leg Length	0.627
9	Foot Length	0.279
10	Chest Circumference	0.397
11	Wrist Circumference	0.473
12	Thigh Circumference	0.313
13	Calf Circumference	0.271
14	Shoulder Diameter	0.573
15	Hip Diameter	0.251
16	Abdominal Circumference	0.271
17	Ponderal Index	0.112
18	Crural Ratio	0.122
19	Hand Circumference	0.159
20	Foot Breadth	0.197

N=82, $r_{0.05(80)} = 0.217$, *Significant at 0.05level.

An analysis of the below table indicates that Basketball performance is significantly related to measurements are Height(0.585*), Sitting Height(0.259*), Weight(0.364*), Palm Span(0.239), Arm Length(0.462), Forearm length(0.299), Hand Length(0.379), Leg Length(0.627), Foot Length(0.279), Chest Circumference (0.397), Wrist Circumference(0.473), Thigh Circumference(0.313), Calf Circumference(0.271), Shoulder Diameter(0.573), Hip Diameter(0.251), Abdominal Circumferences(0.271) as obtained values of Correlation were greater than the value of $r = 0.217$ the Correlation to be Significant at 0.05 level of confidence. The remaining Anthropometric measurements Ponderal Index, Crural Ratio, Hand Circumference and Foot Breadth as their Correlation values are less than the value of $r = 0.217$ need for Significance at 0.05 level of confidence.

Figure-III Anthropometric Measurements and Basketball players Performance



As for the results finally, the study reveals that Basketball performance ability is significantly related to measurements are Height(0.585*), Sitting Height(0.259*), Weight(0.364*), Palm Span(0.239), Arm Length(0.462), Forearm Length(0.299), Hand Length(0.379), Leg Length(0.627), Foot Length(0.279), Chest Circumference (0.397), Wrist Circumference(0.473), Thigh Circumference(0.313), Calf Circumference(0.271), Shoulder Diameter(0.573), Hip Diameter(0.251), Abdominal Circumferences(0.271). As per the analysis my suggestion to the Coaches, Physical Directors, Physical Education Teachers, Physical Instructors to concentrate on the above Anthropometric Variables while selecting or screening for Basketball players. It gives effective and good performance in a specific competition.

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A Study on Communication Skills in English by Secondary School Students.

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Abstract

Being able to communicate effectively is the most important of all life skills. The importance of the ability to speak or write English has recently increased significantly because English has become the global standard language. Learning English language has become popular for business, commerce and especially for internet communications throughout the world. The study was conducted using 't' test to compare the communication skills in English of higher secondary students of government and private school.

Introduction

Communication skills are essential for successful future of students. In today's competitive world, communication skills are the most sought after quality of an educated person. Reading, writing and listening carefully are the three most important communication skills for students. Their skills like most of the communication skills sounds too familiar as a result of which we take for granted. English is acknowledged passport to better education and employment opportunities. English language plays a crucial role to weave the world into single thread. Language is a skill, like any other skill until and unless we practise the skills mastery is highly impossible. The aim of learning language is to communicate effectively. This process involves response and feedback. Foreign language skills and in particular the English are a good tool in work, school on vacation, when building carrier or promote own business.

Objectives

To study the status of English communication skills of students studying at higher secondary level.

To compare the English communication skills of the students studying in higher secondary level in government and private school.

Hypothesis

There is no significant difference between the English communication skills of the students studying at Higher secondary level in government and private school.

Methodology

The present study aims at exploring the status of communication skills in English at higher secondary level. For collecting data, the normative method of research was used.

Sample

Cluster random sampling techniques have been used. The sample of the present study includes 300 students studying at higher secondary level in government and private school.

Tool

To fulfil the purpose of the study the teacher prepared achievement test for English language and grammar test was constructed and standardized.

Statistical technique

The statistical techniques used in this study are the parametric statistics. To evaluate the status of communication skills the coefficient of correlation was used whereas to see the differences between and among groups, t-test was used respectively.

To test this hypothesis 't', test was applied who sample was divided into two groups according to the government and private students at higher secondary level.

'T' test between government and private students at higher secondary level.

particulars	Government schools	Private schools
No of students	75	75
Mean scores	16.02	18.54
Standard deviation(SD)	7.08	4.95
DF	148	
T value	7.48	
T value in table at	level- 2.61 0.05 level- 1.99	

Conclusion

On this basis null hypothesis is rejected and it was concluded that the difference between private and government school students is highly significant. English communication skills of the students in private schools are better.

Suggestions

encourage students to verbalize their knowledge

self development instructional materials should be provides

provision for language programmes

engage students in debating activities

teachers should adopted different interesting methods of teaching in classroom like role-play, drama etc.

A Study Of Job Satisfaction Among Physical Education Teachers Working In Government, Private And Public Schools Of Koppal

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Abstract:

Education is a continuous process. It may be formal, informal or non-formal. In formal education teacher has a very important place in improvement of education. Teachers' role in society .The study will be a useful contribution to the physical education field. The study was delimited to physical education teachers government, private and public schools Selected samples of 75 Physical Education teachers are taken to find out the study of job satisfaction among physical education teachers working in government, private and public schools of koppal District The data collected as mention in chapter III are presented in more meaningful in tabular and percentile from here in this chapter. Before examining job satisfaction among physical education teachers working in governmentKeywords: job satisfaction among physical education teachers in GOV, private and public schools

Introduction

Education is a continuous process. It may be formal, informal or non-formal. In formal education teacher has a very important place in improvement of education. Teachers' role in society, I general and in education has been changing with time but the importance of this position is same. The teacher is the pre-requisite of the success of educational programme. The main quality of teacher is the positive attitude towards education. He she must have the ability to get satisfied from their respective jobs. The attitude of teachers towards education influences the nature and extent of their participation in the education and related educational programme. By developing teachers' with desirable attitude or by shaping their attitudes in desired, effective and productive learning on the part of pupils can achieved.

Today, teaching in Physical Education has become a demanding profession which requires exceptional skills. Physical education teaches have to play a very vital role and their work involves a number of duties such as planning, teaching, evaluative, administrative and various unclassified ones. A physical education teacher requires a greater variety of talents than any other teaching area. His responsibilities are diverse and the society looks up to him as a leader who can create and maintain general fitness of the sedentary people on one hand and help produce sports persons at grass root level, on the other. As a result, physical education teachers working in schools feel their workload heavier,

Statement of the Study

The purpose of the study was to A study of job satisfaction among physical education teachers working in government, private and public schools of. Koppal

The Significance of the Study

- The study has a wide application job satisfaction among physical education teachers working in government, private and public schools
- The study also reveals the changes in job satisfaction due to the among physical education teachers.
- The study will be a useful contribution to the physical education field.

Delimitation

- The study was delimited to koppal district participants
- The study was delimited to physical education teachers government, private and public schools
- The study was delimited to fifty male and female physical education teachers.

Limitations

The following were the limitations of the study:

- The Questionnaire instruments used to measure the job satisfaction due to the among physical education teachers.

Hypothesis

- It was hypothesized that of job satisfaction among physical education teachers working in government are having more than private schools.
- It was hypothesized that of job satisfaction among physical education teachers working in government are having more than public schools.

Methodology

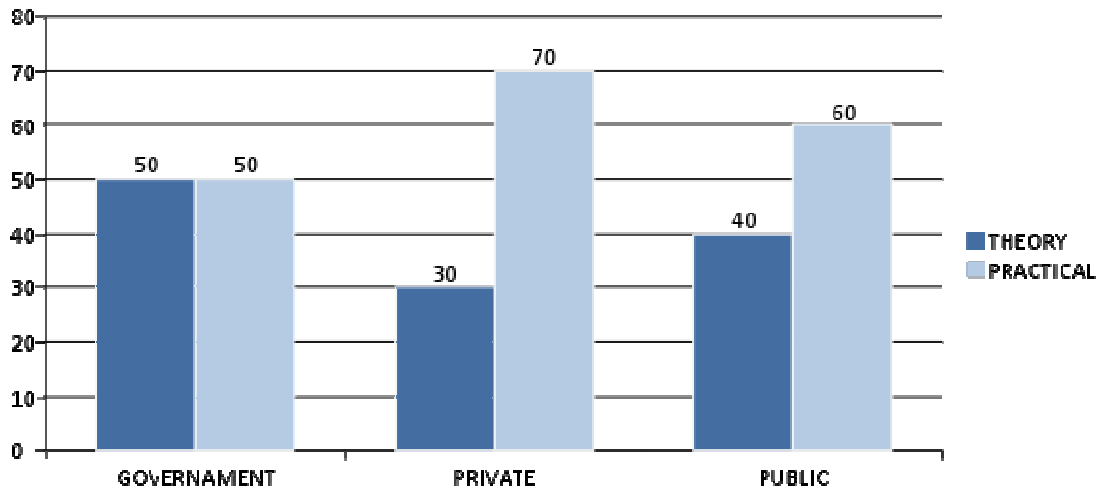
The purpose of the present study was to bring to light the A study of job satisfaction among physical education teachers working in government, private and public schools of koppal and district. Selected samples of 75 Physical Education teachers are taken to find out the study of job satisfaction among physical education teachers working in government, private and public schools of koppal District.

Analysis and interpretation of data

This research study was aimed at identification of the A study of job satisfaction among physical education teachers working in government, private and public schools of Koppal District. Data was collected both male and female of government, private and public school teachers.

The data collected as mention in chapter III are presented in more meaningful in tabular and percentile from here in this chapter. Before examining job satisfaction among physical education teachers working in government, private and public schools of Koppel district, it is better to know a few facts which would show some light on the study and also gives scope for the feasible interpretation as explained we have taken 60 samples from various High Schools from Koppal and District. The questionnaires were administered by the investigator personally and collected data.

Graph No 1: Opinion About Teaching Along With SportsActivities.



Graph –I: indicates that 50% of government, 30% of private and 40% of public physical education teachers interest towards in theory teaching about sports. 50% of government, 70% of private and 60% of public physical education teachers interest in practical teaching about sports. So they have some confusion in teaching the Practical and Theory class about physical education.

Conclusion

The study permitted investigator to come following conclusion

There is positive approach towards sports and games by the male and female teachers of Koppal and district. Some teachers even though they do not participate actively in sports and games and it help to improve their good fitness and maintaining their good health.

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An Experimental Study on Efficacy of Yogic Exercise Program on Short Distance Speed of Kho-Kho Players

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Abstract

The main objective of the present study is to assess the efficacy of yoga exercises program of short duration on short distance speed of male kho-kho players. To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects was done from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group. The subjects of experimental group additionally received three months of yoga exercise training program while subjects grouped into control group did not receive such programme except their usual routine training. Timings on 50m dash was recorded twice i.e. before the commencement of study and immediately after completion of three months yogic exercise program. Results indicate that three months yogic exercise regime has been instrumental in improving the 50m dash timings of male kho-kho players. Therefore it may be concluded yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players. Keywords : Yoga, Speed, Kho-kho

Introduction

Kho-kho is traditional Indian sport and require quick activities across short distances. The nature of kho-kho requires rapid acceleration, hence ability to cover short distance in less time is important. When the distance is shorter, a player needs to get off the blocks quickly and accelerate rapidly. Since kho-kho is a popular sport in India, so many researchers like Dhondge (2011), Singh and Singh (2013), Rana (2013), Jaiswal (2014), Tiwari and Agashe (2016) have conducted scientific studies on factors related to performance of kho-kho players. Surprisingly yoga did not feature in any of the studies although efficacy of yoga in enhancement of physical fitness parameters has been documented quite extensively [Bhavanani and Udupa (2003), Gabbett, T., & Benton, D. (2007), Singh et al. (2011)]. To fill this void, the present study was planned to investigate the efficacy of three months yoga program on short distance speed of male kho-kho players.

Hypotheses

It was hypothesized that three months yoga exercise programme will significantly improve the 50 meter dash timings of male kho-kho players.

Methodology :-

The following methodological steps were taken to conduct the study.

Sample :

To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects comprise of male kho-kho players from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group.

Tools

50 meter dash timing was recorded by standard protocol. Two trials were given and the best time was recorded.

Procedure:

50 meter dash was performed by each subject from experimental and control group before the start of study period. Then male kho-kho players belonging to experimental group were subjected to three months yogic exercise programe which includes 01 hour of yogic exercise comprising of OM chanting, Suryanamaskar, and specific asanas and kriyas for two to five minutes of duration. Subjects from control group were not subjected to any other program apart from their usual exercise routine. 50 meter dash was again performed by selected male kho-kho players after the completion of study period. Timings on 50 meter dash for each subject was recorded twice i.e. pre test and post test. Gain score (Post-pre test) was computed for experimental as well as control group to find out the changes in timings on 50 meter dash during study period. The obtained gain scores for both the groups were then compared with the help of paired sample 't' test. The results are presented in table no. 1 and 2 respectively.

Analysis of Data:

Table No. 1 - Pre and Post-Test Statistics on 50 meter Dash Timings of Selected Male Kho-Kho Players belonging to Experimental and Control Group

Groups	Before Study Mean±S.D.	After 03 months Period Mean±S.D.	Mean Difference	't'
Experimental (N=50)	6.6722 ± 0.12	6.6178 ± 0.07	0.0544	6.23**
Control (N=50)	6.6804 ± 0.09	6.6722 ± 0.11	0.008	0.79(NS)

**

Significant at .01 level; NS - Not Significant

Perusal of table 1 shows no significant change in 50 meter dash timings of male kho-kho players belonging to control group ($t=0.79$, $p>.05$). In contrary to this, male kho-kho players belonging to experimental groups showed improvement in 50m dash timings in the course of study period i.e. taking part in three months yoga program ($t=6.23$, $p<.01$)

To compare pre-post changes in 50m dash timings of male kho-kho players from experimental and control group, gain score was computed and compared.

Results shown in table 2.

Table No. 2 Comparison of Gain Score on 50 meter Dash Timings between Experimental and Control Group

	Experimental Group (N=50)	Control Group (N=50)	't'	Sig.
Mean Gain Score	-.0544	-.0082	3.51	.01

A perusal of entries reported in table 2 indicate that time taken to finish 50 meter dash was found to be significantly reduced ($M = -.0544$) in male kho-kho players belonging to experimental group as compared to male kho-kho players belonging to control group ($M = -.0082$). $t=3.51$, $p<.01$

Results

On the basis of statistical analysis it was observed that time to complete 50 meter dash was significantly reduced in male kho-kho players from experimental group as compared to their counterparts from control group between time span of study.

Discussion

The result indicate improved timings on 50 meter dash of male kho-kho players after participating in specifically designed three months yoga program. The reason may be attributed to improved functioning of central nervous system which enables players to quickly get off the blocks.

Conclusion

It was concluded that yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players.

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Impact Of Age Maturity And Income On The Mental Health Of National Volleyball Officials

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Abstract

Sport is one of the most enduring of all human activities. Virtually from the beginning of any written human records, in civilizations across the world, accounts of sports and sport-related activities are found. For less than the last century sport has been studied scientifically, and sport psychology is an important part of that scientific study. It is an international field, holding the promise of becoming important and only to the understanding of competitive athletic abilities, but to areas of behavior that relate to many domains of human health and activity. The main purpose of the study is to assess the impact of age maturity and income on the mental health of national Volleyball officials. To achieve the purpose of the study the investigator used The Mental Health Scale developed by Dr. Jagadish and Dr. A. K. Srivastava in the present study. The inventory was administered on 20 national volleyball officials of different age group of below 31 years and above 31 years during the Junior State and National Volleyball Championship 2016. It is found that there is a significant difference in their mental health of between different age group of officials. It is due to more participation in sports as official and age maturity provides lot of opportunity to face the challenges and have plenty of experience and try to overcome from the critical sports situation. The obtained value reveals that income plays very less role on the officiating of the officials. Hence, the age maturity and income of a person or a officials play decisive role in shaping the personality of an individual. And participation in sport cultivates skills and mastery over the emotion to control and regulate effectively in sports situation and life situation.

Introduction:

Sport is one of the most enduring of all human activities. Virtually from the beginning of any written human records, in civilizations across the world, accounts of sports and sport-related activities are found. For less than the last century sport has been studied scientifically, and sport psychology is an important part of that scientific study. It is an international field, holding the promise of becoming important and only to the understanding of competitive athletic abilities, but to areas of behavior that relate to many domains of human health and activity. The rises of professionalism in sport and the human craze and quest for "winning" have transformed highly enjoyable sport into a complex behavioral conundrum. The athletes and coaches have to prepare themselves to face the extraordinary emotional and psychological situations to reach new horizons in performance. In sport, competition has gained ascendance over all its other worthily objectives-fitness, health, intellection, socialization, ethics and morality.

Mental Health:

Mental health means ability to balance in one's daily living. In other words it is the ability to face and balance the reality of life (Bhatia, 1982). Mental health is a complex phenomenon depends on a set of familiarly personal, psychological and social variables. Mental health is as n important feature as the physical health of a person to make him complex with balance mental disposition of the children to cope with life more effectively and productively.

Good mental health depends on the good state of both mind and body. Each exert a direct influence on the other, but owing to the power of matter, good mental health is of supreme importance according to Hadfield (1952) mental health is the harmonious functioning of the whole personality.

All kinds of insecurities - physical, mental, social etc., have engulfed the psyche of the people who are mad for more and more materialistic possessions in order to live luxuriously and also to leave the same for generations to come. Today's men are unnecessarily running from early morning till late at night for minting money and amassing wealth with their never-ending lust.

Out of four components of total health of the individual mental health is vitally important because our entire thought process takes place in mind, our all ideas originate from our mind and all kinds of directions are issued from mind which guide, shape and regulate our communication, conduct and behavior and determine our personal and social functioning as well as adjustment.

Mental health is not static but it undergoes change in accordance with time and space and the pendulum of mental health continually oscillates as a continuum of optimism on the one hand and minimal on the other. Further, mental health has to be understood as different from mental disorders which represent a mental state as reflected through varied kinds of symptoms which are relatively enduring, which disrupt the social functioning and are beyond the control of the person who becomes their victim.

Statement of the Problem:

The present study entitled "Impact of age maturity and income on the Mental Health of National Volleyball officials.

Objectives of the Study:

To understand the level of Mental Health among men Volleyball officials.

To know the role of income on Mental Health among men Volleyball officials.

To know the age factor influence on Mental Health among men Volleyball officials.

Materials And Methods:

Personal Data Schedule is framed to collect information regarding the personal and socio demographic status of the sample. The Mental Health Scale was used in the present study. The responses are scored with the help of manual.

Selection of Subjects:

Keeping the objectives in view, appropriate research design is adopted. The 40 officials as sample for the present study are drawn from Karnataka Volleyball Association and were administered Mental Health scale to assess the differences.

Selection of Variables:

Dependent: Mental Health.

Independent: Age and Income.

Collection of Data:

The data were collected from the men Volleyball officials who were worked in National Volley ball Championship and they were administered the Mental Health scale during the sports competitions.

Following tools were used in this present study,

Personal Data Schedule: This is framed to collect information regarding the personal and socio demographic status of the sample. Mental Health scale developed by Dr. Jagadish and Dr. A. K. Srivastava was used in the present study. The inventory contains 56 questions. The responses are scored with the help of manual.

Statistical Procedure:

Keeping the objectives of the study in view, the statistical techniques Mean, SD and t-value were applied.

Analysis And Interpretation Of Results:

In this present study, an attempt is made to examine the extent to which the respondents differ on mental health level. This can be achieved by computing the mean scores of mental health on two sample sub-groups of age and family income. The data are arranged and presented in the following tables.

Table 1 :Mean SD and t-values of Mental Health in Age (N=40)

Category	M	SD	t-value
Below 31 years	52.9	3.03	3.28**
Above 31 years	50.27	2.10	

**significant at 0.01 level

Table 1 presents the data of two age group respondents in respect of mental health variable. Again both age groups (N=40) are divided into two categories, i.e., above 31 years and below 31 years. As per the norms of the mental health scale, one who scores high is categorized as low mental health while one who scores low is considered to be of high mental health.

In table 1 it can be noticed that the respondents of above 31 age group have scored a mean of 50.27 in mental health level while the below 31 age group have scored a mean 52.9. The t-value is 3.28 which is significant 0.01 level. This shows that there is significant difference in mental health level of volley ball officials in relation to their age factor. Thus, higher age respondents have more organized perceptions and mentally healthy than those of lower age counterparts.

Table 2:Mental Health Level of Sample in relation to their Income (N=40)

Category	M	SD	t-value
Below 50 thousand	52.38	2.81	2.62**
Above 50 thousand	50.25	2.43	

**Significant at 0.01 level

It can be seen through table 2 that the respondents of above 50 thousand income group have scored a mean of 50.25 in mental health level while the below 50 thousand income group have scored a mean 52.38. The t-value is 2.62 which is significant 0.01 level. This shows that there is significant difference in mental health level of volley ball officials in relation to their income factor. Thus higher income sample are more mentally healthy than the lower income sample.

Conclusions:

The above 31 age group officials have better mental health than the below 31 age group Volleyball officials.

The above 50 thousand income Volleyball officials have better mental health than the below 50 thousand income.

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Effectiveness Of Scheduled Caste Act In Promoting Equality Status Of SC Communities In India

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Abstract:

Scheduled Castes subjected to a variety of disabilities, deprivations and oppression under the traditional system. They were placed outside and down below in social and ritual hierarchy under the *Varna* model of society. In spite of their common deprivations and disabilities, the scheduled castes did not constitute a ritually homogeneous category. Through the reservation granted to SC and ST, these castes people get various jobs, etc that were not given to them earlier, and hence they were NOT able to ensure better life for their children. Constitutional declaration of its abolition under Article 17 of the Constitution abolition of untouchability being practiced in society. The present study analyses the major implications of the constitution to protect the scheduled caste people. Present also effectiveness of the Scheduled Caste Act in increase economic status of SC communities in India. Data would like to collect from both primary and secondary sources. Primary sources from direct interaction with scheduled caste people living in rural India. And secondary data will collect from various sources journals, reports, news Paper etc.

Introduction:

The Scheduled Castes constitute about 16.6 percent of India's population (according to the 2011 census), which is nearly 20.14 crore against 16.66 crore in 2001. Vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure and defenceless in the face of risk, shock or stress. People differ in their exposure to risk as a result of their social group, gender, ethnic or other identity, age and other factors. The Constitution of independent India which largely followed the pattern of the Government of India Act, 1935, made provisions for positive discrimination in favour of the Scheduled Castes and Scheduled Tribes (SCs & STs) which constituted about 23% of the divided India's population. Besides reserving parliamentary seats for them they were given advantages in terms of admission to schools and colleges, jobs in the public sector, various pecuniary benefits for their overall development, and so on. The constitution indeed guaranteed the fundamental right of equality of all citizens before the law but it also categorically laid down that nothing in the constitution "shall prevent the State from making any special provision for the advancement of any socially and educationally backward classes of citizens or for the Schedules Castes and the Scheduled Tribes".

Government is giving special importance to implementation of the schemes for welfare of Scheduled Castes, Scheduled Tribes and Minorities. The allocation for the welfare of Scheduled Castes has been stepped up from Rs. 38,833 crores in BE 2016-17 to Rs. 52,393 crores in 2017-18, representing an increase of about 35%. The allocation for Scheduled Tribes has been increased to Rs. 31,920 crores and for Minority Affairs to Rs. 4,195 crores. The Government will introduce outcome based monitoring of expenditure in these sectors by the NITI Aayog.

Objectives of the present study:

The present study analyses the major implications of the constitution to protect the scheduled caste people. Present effectiveness of the Scheduled Caste Act in increase economic status of SC communities in India. To suggest various measures to protect SC's from vulnerability.

To analyse the various measures taken by the government to protect the schedule caste people.

Need for the study:

The Constitution of India made a provision that the President may specify the castes, races or tribes which shall be deemed to be Scheduled Castes. The President of India has passed orders from time to time specifying the names of scheduled castes in the country. In spite of their common deprivations and disabilities, the scheduled castes did not constitute a ritually homogeneous category. The various castes belonging to this category form a ritual hierarchy somewhat similar to the Varna model. They do not practice intermarriage and sometimes do not interline. Therefore there is need to study the reasons and measures to protect SC's from vulnerability.

Some of the constitutional provisions which aimed at positive discrimination are:

Article 17: Abolition of "untouchability" and making its practice in any form a punishable offence.

Article 46: Promotion of educational and economic interests.

Article 16 and 335: Preferential treatment in matters of employment in public services.

Article 330 and 332: Reservation of seats in the Lok Sabha and State Assemblies.

Later, the job-related positive discrimination was extended to government-supported autonomous bodies. A 1974 Government order laid down that all such bodies which employed more than 20 people, and where 50% of the recurring expenditure was met out of grants-in-aid from the Central Government, and which received annual grants-in-aid of at least Rs.200,000 should invariably provide for reservation of SCs and STs in posts and services. The general rule which exempted the scientific and technical posts from the purview of positive discrimination was applicable to the autonomous bodies too.

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989 (POA) was passed to protect the weakest and vulnerable segments of our society. The POA has proved to be a pioneer in many ways:

(A) Provides for the appointment of special courts to deal with cases relating to atrocities on SC and ST

(B) Provides for punishment of a public servant who wilfully neglects his duties under the Act

(C) Allows the forfeiture of property of perpetrators of offences defined under the Act

(D) Allows for the externment of person likely to commit offences defined under POA from schedules areas

However POA has proved to be impotent and ineffectual in practice on account of the following reasons:

(A) Police instead of filing cases under POA, filed cases under the normal provisions of the IPC, which facilities easy bail of the accused persons

(B) Low conviction rate of person accused of committing atrocities due to hostile role played by investigators

(C) Lack of awareness among the SCs and STs about their rights. Also given the strong caste hierarchies in rural areas, many are reluctant to approach police officials, who inevitably belong to dominant caste

(D) Lack of political commitment and will to effectively implement the Act

The implementation of the Act mainly suffers due to

(i) Poor coordination between the enforcement authorities at the State and district level.

(ii) Procedural hurdles such as non-registration of cases;

(iii) Procedural delays in investigation, arrests and filing of charge-sheets; and

(iv) Delays in trial and low conviction rate.

Hence, SC/ST Amendment bill, 2014 was brought in to:

- (a)Expand its presumptions such as punishment for neglect of duties by public servants not belonging to SCs and STs.
- (b)Provides for new category of Offences
- (c)Set up Exclusive special courts and Special public prosecutors for trial of offenders under the Act.
- (d)Many essential rights of the victims and witness were covered so as to impose duty and responsibility on the state for their protection.

Recommendations

There are certain incidents referred to within the act that require coordinated legislative efforts. Preventing sexual assault and exploitation of the group has to be a coordinated effort of law-enforcement agencies and efficient local administration. Most crimes are community driven with upper castes still stubbornly holding on to out dated caste norms. These need to be addressed at the grass-roots through community outreach programs.

-Stricter norms against crimes against SC/ST women. If obtaining gender equality is a norm, then this should be the pinnacle of this initiative. This is only possible again through proper regulation. Concepts such as 'devadassis' show the warped prevalence of religious libel that has a hold on the psyche. These need to be handled through public-service announcements.

-Neglecting of duties to be performed by public servants is a welcome measure. It would deter them from themselves practicing castist norms.

-Allowing for proper forums to bring issues of resource sharing and public access. Lok Adalats in this regard need to be reinforced and made as important legislators at the grassroots.

-Alienating SC/ST from resource access. This should be made a punishable offense. If necessary, then a separate fund demarcated to allow construction of water and waste infrastructure in districts to better the poorest SC/ST families.

In addition to above provisions, there is a need to address the problem of false and malicious complaints within the Act as the relevant provisions of IPC are insufficient to deal with it.

Also special courts for women must be provided for, where atrocities against ST/ST women are tried by women judges and women public prosecutors, preferably from SCs/STs.

Conclusions:

Given the poor implementation of the Act, untouchability, a practice declared illegal under Article 17 of the constitution continues to remain a reality for several SC/ST households. In this light, the proposed amendments to POA, which seek to give this paper tiger some actual teeth is welcome. -exclusive special courts establishment, appointment of public prosecutor and special public prosecutor, speedy trials with time limits, security and safety of victims and witnesses. Sensitising the bureaucracy/police to curb this menace and educating people, inculcating the young minds about these things and bringing the equality concept at the fore should be the strategy. People should recognize the dark past of some of the most vulnerable castes in India & create awareness for their well-being.

**A Comparative Analysis On The Physiological Variables Among Voleeyball And Handball
Players Of Kakatiya University And Satavahana University**

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Introduction:

Health and physical fitness have played a vital role in the life of a man from time immemorial. The progress of a nation lies in the hands of the people, who are healthy and physically-fit. Physical activity is essential for the development of the wholesome personality of the mental, physical, social and spiritual well-being. Hence, a well-organized properly planned and ably-administered physical education program for school children is very essential for building up a healthy and happy nation.

Physical activity throughout the ages has been acclaimed for health and recreation. It has provided fun and enjoyment, promoted youthful exuberance and energy, and prolonged the lifespan. Not for nothing, it is said "A healthy mind in a healthy body".

Children express their world of fantasies and imagination through creative play. Great educational thinkers feel it to be the most suitable avenue for child's education. But the implementation has not been to the desired extent. The handicapped may find wider opportunity to express their creative thinking through various adapted movements.

Thus, it is not simply 'play for play's sake' it is not also just striving for excellence activity and sports ought to build up strong manpower, develop mutual trust, co-operation, solidarity and friendship among individuals, sportsmen and nations.

The concept of fitness has been unfortunately interpreted differently by different investigators. It is a positive quality of extending movement, alertness of mind emotional adjustment. It is the result of genetic makeup and interaction with the environment. Fitness is also fundamental to success in education, for that matter, in any other field of life, which should be achieved in youth. Then alone will national growth and development be possible.

The process of grading and selecting the best in physical education often leads to some dissatisfaction among the variables which comprise elite performance and is not only numerous but varied. Undoubtedly, observation, testing and analysis are very vital.

Unfortunately, in our country, this process is yet to pick up. This deficiency probably accounts for the disappointment in the country over the poor performance of our sportsmen in international sports competitions or winning laurels at international sports areas. This indeed is a matter of national prestige taking into account the vast manpower and national resources.

Physiological variables

Anaerobic, Resting pulse rate and Breath holding time

Selection of subjects

To execute this investigation, the researcher has selected the subjecting random selection method. To conduct this study 120 volleyball men (60 KU + 60 SU) and 120 Handball men players (60 KU + 60 SU) were selected from the university teams of the years 2013-14,2014-15,2015-2016, for the comparison physiological variables.

The researcher has collected the data during inter university coaching camps of Kakatiya and Satavahana University men Volleyball and Handball players on the above variables. The collected data was subjected for statistical analysis.

Table 1 show the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Volleyball players in respect of breath holding time test.

	Kakatiya University		Satavahana University	
Breath holding time	Mean	SD	Mean	SD
	38.7	7.92	43	7.88

Table 2 show the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Handball players in respect of breath holding time test.

	Kakatiya University		Satavahana University	
Breath holding time	Mean	SD	Mean	SD
	43.68	6.92	45.83	7.56

Table 3 shows the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Vallyball players in respect of anaerobic power test.

	Kakatiya University		Satavahana University	
Anaerobic power	Mean	SD	Mean	SD
Kgs * Mts/sec.	125.1	9.83	123.24	11.88

Table 4 shows the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Handball players in respect of anaerobic power test.

	Kakatiya University		Satavahana University	
Anaerobic power	Mean	SD	Mean	SD
Kgs * Mts/sec	124.1	11.39	125.05	8.86

Table 5 shows the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Volleyball players in respect of resting pulse rate test.

	Kakatiya University		Satavahana University	
Resting pulse rate	Mean	SD	Mean	SD
Per minutes	74.28	5.69	75.4	6.51

Table 6 shows the calculation of Mean and Standard Deviation of Kakatiya University and Satavahana University Handball players in respect of Modified sit-ups test.

	Kakatiya University		Satavahana University	
Resting pulse rate	Mean	SD	Mean	SD
Per minutes	71.27	5.52	67.6	6.73

Results Of The Study:

The results of the study presented in the tables from (1-6) shows that there is a difference in the Mean and Standard Deviation values among the Volleyball and Handball men players of Kakatiya University and Satavahana University in respect of Breath holding time, Anaerobic power and Resting pulse rate. The obtained values of Mean and Standard Deviation shows that there is a difference among the Volleyball and Handball players of Kakatiya University and Satavahana University Telangana men players.

The tabulated values shows that Kakatiya University Volleyball and Handball players showed better when compared to Satavahana University among Volleyball and Handball players.

This may be due to the fact that Satavahana University and karimnagar University players are studying arts course and due to the academic pressure they may not able to show good performance, where as Kakatiya University players are from different courses.

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Physical Literacy On School Childrens And College Students – Of Hyderabad District In Telangana State.

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Introduction:

There is less physical activity in pre-primary and primary schools in Hyderabad , Telangana. Physical fitness is not doing in the Schools as well as Colleges, on the other side parents are busy in their domestic works. So children are becoming addicted for internet especially the age group between 8 years to 12 years for online games and between 13 years to 16 years are being addicted for Internet and Social media. In the same way the teenage students between the age group 17 years to 21 years are being addicted for Internet, Online Games they in their dreams world by addicting such games which changing their lives as cruel animals in the society and involving in several criminal activities and increasing the same in Day to Day life. If observed for the past 10 years (2007 – 2017) Many criminal activities have been increased in students transformation.

There are many examples for the incidents occurred recently. The main reason for this is there is no Physical Education knowledge and Physical activities has not been taking place in many Schools and Colleges, due to this the students are suffering Physically, Mentally and Socially they are becoming weak, and they have been committing for suicide for small reasons which is increasing day by day in recent times and the same is becoming main problem.

By playing Online Games, Video Games, Mobile Games and Face Book, Whatsapp, Instagram, Twitter and are being addicted for other social Media activities, in view of reason their food habits have been changed and students led to obesity diseases and students are suffering with various diseases. Especially it leads to Obesity, Head Ache, Migraine, Cardio Vascular diseases, and Kidney related diseases and with other diseases.

Most of the time spending on internet and social media, due to this students were not in a position to concentrate, getting weakness and lack of peace and sleepless. Unable to concentrate on any work, Felling loneliness which leads for committing suicide. In daily life style, mainly there has been no physical activity, facing physical and mental problems in many reports and psychological experts and doctors have been warning through reports.

Result And Discussion:

1. There is no time allocated for providing physical education as one subject and not allocated time for sports and games in Schools and colleges.
2. Parents have been involved in their works and there is no time for them to check their children activities, what they are doing. Lack of awareness about physical activities and giving priority for education only.
3. There is no physical education teachers, and lack of play grounds and necessary infrastructure with regard to Sports and Games.
4. Even they are not spending for one hour for physical activities in daily life style, due to this they are addicted for other bad habits.

Example : Drugs, Online Games, Social Media, Blue Whale Games etc.,

Conclusion:

If the priority for physical activities are provided in Primary Schools, Secondary Schools and Higher Education in Telangana, So the physical strength and mental strength will increase in the students. To achieve this result, physical activities should be implemented in Telangana State schools and colleges, so the students will be far away against bad habits and involving in social activities and they will be physically ,mentally and Socially fit.If physical activity is provided for children in primary stage and same will be habituated for them and they will not be addicted for any bad habits. In the modern days, it has become common to addict for internet and social media. So on this issue, parents should have awareness about physical activities and there is need to take care about their children. Other wise there will be chances of great loss for Community and their parents.The above reasons are causing for increasing criminal activities. So parents are not been taking care about their children and there will be chances to habituate them for criminal activities, bad habits. Hence at this juncture there will be need and the parents should take more care about their children

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Teaching Styles In Physical Education

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Introduction

Physical education is an integral part of the educative process which uses physical activity as a primary means to promote psychomotor, cognitive, and socio-affective growth in order to enhance the quality of life (Holst, 1993). Traditionally physical education classes have only focused on the psychomotor, or physical, aspect of learning (Poynton, 1986). The idea nowadays is to address all domains of learning. When teaching there are an assortment of styles or methods a teacher may choose from. These methods are ways of organizing and presenting the learning experiences to children. The styles range from a direct, teacher-centered approach to an indirect, more student-centered approach. In the past direct, teacher-centered methods have been used predominately, however recently the trend seems to be shifting towards a more indirect, student-centered approach. Normally the student-centered teaching style is more time consuming and requires more preparation by the teacher, however the benefits to be gained from these methods are definitely worth the extra time spent developing the lesson. The methods are not easy for a teacher to grasp without putting an effort into it. In order for a teacher to become comfortable and successful with using these methods it will take substantial practice on the part of the teacher involved. The teaching styles discussed in this report will start with the teacher-centered, command approach, followed by practice, reciprocal, and the task approach. Thereupon it will continue with increased student-centered methods, such as guided discovery, problem solving, and exploration. As you go across the continuum of teaching styles the teacher has less influence in the decision making, and the student becomes the prime decision maker.

1.Command

The command style is the most teacher-directed style of the seven styles (Mosston, 1992). In this type of style the teacher is the exclusive decision maker. Decisions on what to do, how to do it, and the level of achievement expected are all determined by the teacher (Nichols, 1994). With this style the teacher will give a demonstration of the expected performance, as well as emphasize and explain specific important points of the movement. The demonstration gives the students an opportunity to see the skill performed accurately and observe the critical elements of the task. The teacher may guide the class through the various steps in carrying out the task. The students repeat the performance many times as they put the movements together in the proper sequence and timing. The teacher also makes additional helpful commits to a student or a group of students when necessary. Some examples of when it would be advantages to use the command style is when showing a child how to overhand throw, instructing a specific dance step, or teaching someone to shoot a free throw in basketball. These are all tasks that have to be done in a specific fashion making the command style a very efficient method of accomplishing the task.

2. Practice

The practice style is one of the most common teaching strategies used in physical education (Mosston, 1992). It is very similar to the command style in that the teacher is the primary decision maker, and the task will also start with a demonstration and description of what is to be achieved. The demonstration does not necessarily have to come from the teacher, it may come from another student or even from audiovisual aids. The students then practice the skill, either on their own or with a group, as the teacher observes their performance and offers feedback. The difference between the command and practice style is that the practice style does permit some decision making by the students. For instance, the students may decide where they will practice and if they will be working with, or without, a partner (Nichols, 1994). At the end of the session the teacher may review what they did, emphasizing the essential points to have learned. The practice style is very useful, especially when coaching. For example, if the coach is showing the team how to forearm pass a volleyball he/she would first explain the forearm pass, telling when and why it is used and describing the critical fundamental points of the forearm pass. This would be followed with one or more demonstrations of the skill being executed, once again emphasizing the key elements of the skill. The players are then given time to practice the skill, either by themselves or with a partner. The coach can then walk around making corrections and providing encouragement. At the end of the practice the coach may ask the players to discuss the points of emphasis before going on to the next lesson.

3. Reciprocal

The reciprocal style allows more decision making by the students as compared to the command and practice styles, which are much more teacher dominated. With this style the teacher develops a reciprocal task sheet (appendix A) which describes the task to be performed and points out what the observer should be looking for to see if the performer is executing the task properly. The students are the observers and are responsible for viewing the performance of their classmates and providing feedback on each attempt (Nichols, 1994). The reciprocal task sheet may include pictures and a description of the task to assist the observer. It should also explain the role of the performer and observer, as well as give the amount of time or number of trials to be given in each practice session.

The session is usually initiated with a demonstration, a description of the skill, and an interpretation of the reciprocal sheet. Once this is accomplished, one student performs the task as their partner observes the performance and records when the proper criteria has been met. The observer also provides positive feedback to help improve their partners performance of the skill. After the performer has properly executed the task a specific number of times the partners switch roles. With this style the duty of the teacher is to walk around observing the students and clarifying the tasks for both the performer and observer.

4. Task

The task style still has the teacher deciding the content of what will be taught, however it allows the students some decision making and provides them with the chance to work at their own pace (Mosston, 1992). This type of style has the teacher designing an arrangement of tasks leading up to the unit outcomes. The tasks are then broken down into a group of activities, each at a different level of difficulty, in which the students progress to achieve the final task (Nichols, 1994).

The first level of difficulty should be below the most poorly skilled students and the activities should gradually increase to a level above the most highly skilled students. More decision making is required by the students as the level of difficulty increases. During the first stage (lowest level) the teacher presents a task that is broken down into several levels of achievement. All the students are working on the same task, however the students are allowed to begin at a stage within the task that they feel comfortable with and eventually progress through the activity.

At the second level the teacher looks at the ability level of individual students and based on their level the teacher will assign specific tasks.

The third level (highest level) requires the greatest amount of decision making and responsibility by the students. Each student is given a task booklet describing all the tasks to be completed in the unit. The student chooses the tasks they wish to practice and are responsible for working on each task within the unit time (Nichols, 1994).

In this style the teacher is a valuable resource, however other aids should be provided, such as pictures, books, posters, and even film. If the students are not encouraged to use these other resources they may become dependent on the teacher for information.

The students need to be able to determine when a task has been accomplished. This can either be decided qualitatively or quantitatively, and a partner or the teacher can perform the evaluation. Having the teacher do all of the evaluations may be wasting time, besides the students should have the chance to be responsible for their own evaluation and the evaluation of their peers (Nichols, 1994).

5. Guided Discovery

The guided discovery method crosses over into the student-centered section of the continuum. This approach continues to use teacher-designed movement tasks, however, it is done in a way that allows the children to make individual decisions about how to move (Mosston, 1992). In other words, the teacher defines the intended outcome of the movement response, but does not determine how it will be attained. This method is useful if the teacher is trying to get the students to discover the most desirable movement for a certain task or to develop a new skill (Nichols, 1994). This allows the students to experiment with different movements in order to achieve the desired goal. It will also increase their understanding of why certain movements are more advantageous and effective than others. This method is also an ideal way for students to discover possible strategies of specific games (Rauschenbach, 1996). The idea behind this method is that the students will make up their own minds about how they will move, however limitations are enforced that narrow the students choices, thus limiting the range of movement responses. This eventually leads to the single desired outcome the teacher was looking for. This method permits the students to experiment with the movement, to make comparisons with other movement responses, and to analyze the possible motor responses (Nichols, 1994).

6. Problem Solving

The strategy of problem solving is very similar to the strategy of guided discovery except for one important difference. With the guided discovery approach there was only one proper way of performing the final movement or task, therefore the final outcome would always be the same. With the problem solving approach several solutions can be the end result (Nichols, 1994). In problem solving, as with guided discovery, the teacher will present a movement challenge that has certain guidelines. The guidelines may be a limitation on the use of space, directions, or movements permitted. The goal is not to find a single correct answer as with guided discovery, instead the objective is for the students to find as many different solutions to the challenge as possible (Nichols, 1994). Any movement response that fits within the guidelines is totally acceptable.

7. Exploration

Exploration is the most student-centered style on the continuum (Nichols, 1994). With this style the students are permitted to move as freely as they desire, while staying within the limits of safety. The style is similar to that of problem solving, except the students are exploring the movements in a less restrictive and more natural environment with much less teacher direction (Nichols, 1994).

This style can be very beneficial when introducing concepts, ideas, and new equipment. It is also a good way to obtain fresh unique responses and ideas from the students. Because this style provides the students with a great amount of freedom to work at their own pace and do what they want it is important to understand that the teacher does not simply set up the equipment and let the students play totally on their own. The teacher does have some say in what the students do. For example, the teacher may ask "How many different things can you do with that ball?" The teacher must keep in mind the individual needs of students and set new challenges when they are ready to progress. perform at this level, as well as those who have greater skills than the activity requires, their individual needs are not met with these styles. Another notable drawback of the teacher telling the students how to respond is it does not encourage original or innovative thinking by the students.

Conclusion

Physical Education teachers have several methods of teaching that may be employed. These methods vary in terms of who makes the decisions of what will be learned and how the learning will occur. Some methods are teacher-centered, whereby the teacher is the primary decision maker, and others are more student-centered allowing the students increased input on what they do. As mentioned earlier the most teacher-centered is the command style. Decisions of the content to be learned, how it will be learned, and so on are all determined by the teacher. The similar practice style is also very teacher-centered.

The teacher will demonstrate and clarify the skill or task, the students go and practice it while the teacher observes them and provides feedback when necessary. With the reciprocal style the students have to take on more responsibility. They are accountable for the learning of their peers as they have to analyze their partners performance and give feedback. The task style shares the decision making. The teacher decides how and what will be learned, and the students choose the task or level at which they will begin working on. The teacher guides the students through an assortment of activities eventually leading to the discovery of the proper movements for a specific task, in the guided discovery style. Problem solving and exploration strategies are the most student-centered, by reason that they each allow the students to decide for themselves the movement responses (Nichols, 1994). In problem solving the teacher will ask certain questions, such as "how many different ways can you move in the space provided?" As long as the students responses are within the criteria the answer is not wrong. Exploration offers the least amount of teacher direction and is particularly useful when working with young children. It is difficult to say which style offers the maximum potential for learning because not all people will receive optimal learning by use of the same style. Certain material may be presented really well with one style and not as well with another. The availability of time is another concern affecting the style chosen. A teacher should always try to meet individual needs and personal differences of each student. The best methods to achieve these goals are found within the indirect, student-centered approach. The important thing is for the teacher to be able to determine what style is most appropriate in a given situation and apply it with determination and confidence.

Reccomendations

Teachers should be able to proficiently and effectively use all seven of the teaching styles depending on what the situation calls for. There are benefits and drawbacks in each of the styles, therefore it is important for the teacher to know when to use a specific style.

If the goal of the lesson is to be extremely organized, have a unified response, save time, or have a quick direct route to the task then the command or practice styles are recommended. If the purpose is for the students to develop responsibility, social skills and/or analytical skills then the reciprocal or task style is recommended. It is recommended that the guided discovery method be utilized if the objective is to have the students think for themselves and develop a greater understanding of the proper movements. When the intent of the lesson is not to teach a particular outcome, but instead to improve development in conceptual, cognitive, and problem solving areas, as well as enhance creativity in the movements then the style of problem solving is surely recommended. In the event that you are working with young children who are involved with their first physical education experience it is more appropriate to allow them the freedom to work and explore movements on their own, thus it is recommended that the exploration method be used for this situation.

Sports Medicine is The Field Of Medicine Concerned With Injuries Sustained In Athlete Endeavors Including Their Prevention of sports injuries and rehabilitation through exercises

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Introduction:

Sports medicine is a branch of medicine the deals with physical fitness, treatment and prevention of injuries related to sports and exercise. Sports medicine is the field of medicine dealing with injuries sustained in athletic endeavors and illnesses impacting sport performance. Sports medicine focuses not only on the diagnosis and treatment of diseases and injuries related to sports, but also on injury diseases prevention and management. The goal of sports medicine is to assist the athlete in achieving both optimal health and peak performance.

Aims of sports Medicine:

To aware the sports person & athlete about the different kinds of injury in respect of different games.

To concentrate on the causes of injury lack of warming up

Lack of technique / skills

Physical fitness components

Psychological factors

To provide adequate medical help-Different methods & equipments of treatment-Rehabilitation centers

To knowledge of kinds of injury & their necessary precaution i.e protective measures

Sports injuries: injuries are common in the field of sports and games. During practice, training or competition, any player can be injured. Perhaps, there will not be any player who has not been injured during his sports career. Indeed, it is natural to get injury. Though coaches, physical trainer and sports doctor have been making their best possible efforts to prevent injuries but they have not got a complete success so far.

The main causes of sports injuries: sports injuries are most commonly caused by poor training method ; structural abnormalities; weakness in muscles, tendons, ligaments; and unsafe exercising environments. The most common cause of injury is poor training.

There are various types of common sports injuries which are fallows:

Soft Tissue Injuries

Skin injuries- abrasion, laceration and blisters

Muscle injuries- tears or strains of muscle fibers and contusions

Tendon injuries - tears or strain os tendon fibres and inflammation(tendonitis)

Ligament injuries- sprains and tears of ligament fibres.

Soft- tissue injuries can result in internal bleeding and swelling. Prompt and effective management of this bleeding aids recovery. Soft- tissue injures are covered.

Bone injuries ,Simple fracture,Compound fracture,Complicated fracture,Comminuted fracture

Impacted fracture,Depressed fracture ,Joint injuries

Dislocation of shoulder joint ,Dislocation of hip joint

Prevention of sports injuries :

The life a sportsperson is very valuable. Some times a sportsperson gets such injury that he can not take part in sports again. In this way his sports career may come to an end. However ,many types of sports injuries may be treated but even then it is a fact that prevention is better then cure. That is why most of the athletes or sportspersons want to reduce or eliminate the chances of injury while performing training or participating in sports competition. Sports injuries decrease the amount of time a sportsperson may spend on sports training. Even some times, due to injury, a sportsperson an not take part in sports competition . it may have a negative impact on the sports performance. The famous sports scientist suggest thst the injury rate can be reduced by 25% if sportspersons take appropriate steps for the prevention of sports injuries which are mentioned below:

proper warming ,proper conditioning ,Balance diet,Proper knowledge of sports skills

Use of protective equipment

avoid training when you are tired, increase your consumption of carbohydrate during periods of heavy training. Any increase in training should be matched with increase in resting treat even seeming. Treat even seemingly minor injuries very carefully to prevent them becoming a big problem. If you experience pain during training, stop your training session immediately. Never train hard if you are stiff form the previous effort . pay attention to hydration and nutrition.

Rehabilitation through exercises: Many sportsperson get injured during their competitive careers. All the sports injuries do not need rehabilitation. There are few types of injuries which require rehabilitation process. There may be some injuries which are severe enough to require a very formal rehabilitation process. There may be some injuries which are severe enough to require a very formal rehabilitation process. It is usually seen that coaches and sportspersons do not have enough patience, therefore, sports- persons return to play before they complete rehabilitation process. Knowingly unknowingly such as act may enhance the rehabilitation process. As a matter of fact, rehabilitation is the restoration of an injured part to normal or near to normal function. Until the sportsperson recovers completely he should not return to the activity. If he takes part part in activity without complete rehabilitation the result may not be positive. For example, weight training too early after injury can create more problems to a sportsperson by increasing damage to already injured tissue. In fact, there should be a well qualified therapist for providing rehabilitation. The actual rehabilitation process can be applied in severe cases of sprain and strain and mild to severe cases of fracture and dislocation.

Rehabilitation exercise for elbow injuries: if instructed by your medical doctor, you may begin this exercise when the pain has started to decrease

Elbow Stretch: Hold your injured arm at shoulder level in front of your body with the elbow straight. With your fist clenched, flex the wrist as far as possible. Return the wrist to a neutral position, and alternately turn the arm inward with a flexed wrist and then outward with an extended wrist. Repeat 10 times, do 3 sets of 10.

Wrist Range of Motion: Bend your wrist forward & backward as far as you can. Repeat 10 times, do 3 sets of 10.

Forearm Range of Motion: With your elbow at your side and bent 90 degrees, bring your palm facing up and hold for 10 seconds. Slowly turn your palm facing down and hold for 10 seconds. Repeat this 10 times. Do 3 sets.

Elbow Range of Motion: Gently bring your palm up toward your shoulder bending your elbow as far as you can then straighten your elbow out as far as you can. Repeat 10 times, do 3 sets.

Wrist Strengthening:

A. Wrist flexion: Hold a small weight or hammer handle with your palm up. Slowly bend your wrist up. Slowly lower the weight and return to the starting position. Repeat this 10 times, do 3 sets of 10.

*Gradually increase the weight you are holding.

B. Wrist extension: Hold a small weight or hammer handle with your palm down. Gently bend your wrist up. Slowly lower the weight and return to the starting position. Repeat this 10 times, do 3 sets of 10. *Gradually increase the weight you are holding.

C. Wrist radial deviation: With your wrist in the sideways position and your thumb up, hold a small weight or hammer handle. Gently bend your wrist up with your thumb reaching towards the ceiling. Slowly lower to the starting position. Repeat 10 times, do 3 sets. *Do not move your forearm throughout this exercise.

Wrist Extension: Stand up and hold a broom handle in both hands. With your arms at shoulder level, elbows straight and palms down, roll the broom handle backward in your hand as if you are reeling something in using the broom handle. Repeat for 1 minute and then rest. Do 3 sets. Pronation and Supination Strengthening: Hold a small weight or hammer handle, with your elbow bent 90 degrees. Slowly rotate your hand with palm upward and then palm down. Repeat this 10 times, do 3 sets.

Elbow Flexion and Extension Strengthening: Hold a small weight with your palm face up. Slowly bend your elbow so that your hand is approaching your shoulder and then lower it down slowly so your elbow is completely straight. Repeat this 10 times, do 3 sets. *Slowly increase the weights you are using.

Grip Strengthening: Squeezing a rubber ball or stress ball will also strengthen the injured area. If that is too difficult, start by squeezing a sponge or washcloth in water. Repeat 20 times, several times a day.

Twisting: With your arms outstretched, practice wringing out a dry towel with both hands. Repeat 20 times.

Conclusion:

All the above sports injuries occur during any sports activities or exercising. They can result from accidents, poor training or warming up technique in practice, inadequate equipment, and overuse of a particular body part. It is very important for any one related to sports field to be aware about all kinds of sports injuries cause symptoms, prevention and treatment, in order to manage an injury prevention program as a team, which includes education on rehydration, nutrition, monitoring team members, monitoring behavior, skills, and techniques.

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Comparison of sports performance Anxiety among the male kho-kho Players at Osmania University Telangana

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Abstract:

The purpose of the study was to analyze and compare the sports competition anxiety among kho-kho players in the Osmania university area. The sample of this study for thirty (N=30) was taken by male players from the hyderabad district and medakas a subjects range of subjects aged 18 to22 in Osmania university players as a subject with simple random sampling have been selected availability sports competition Anxiety questionnaire (SCAT) was used for this study Martens et al., 1990 it measure sports anxiety compaction means S.D and "t" value was used to analyze and compare the level of anxiety sports competition among players in the Osmania university area The significant level was set at 0.05 the results indicated that there were no significant differences found in hyderabad and medak male kho-kho players in Osmania university Telangana.

INTRODUCTION:

Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. Players with anxiety disorders usually have securing intrusive thoughts or concerns. They may avoid certain situation out of worry. They may also have physical symptoms such as sweating, dizziness or a rapid heartbeat. The are two distinct aspects of an anxiety. One aspect emanates toward trait anxiety. Trait anxiety relates to innate characteristics that humans are born with. For example having a tendency to throw up before important competition. A second form of anxiety is related to the state, whichis situational specific. For example, a performer may feel anxious when free throwing in basketball. Related to these aspects there are two mechanisms that are identified as somatic (physical feelings') and cognitive (mental) anxiety. Performers can suffer with both types of mechanisms or predominately for one over the other. Common symptoms of somatic anxiety include, experiencing butterflies, sweating, heavy breathing or a elevated heart rate. Common symptoms of cognitive anxiety include negative though thought feelings of apprehension or nervousness. Dealing with anxiety related symports could be difficult because what works for one performer may not work with another. Therefore, practitioners need to be flexible in their approach and utilize a range of different strategies.

Purpose Of The Study:

The purpose of this study was to compare the sports competitive Anxiety among the kho-kho Players of Hyderabad District &Medik District of Osmania university area.

Methodology:

In this study forty (30) male kho-kho players form Hyderabad district and Thirty (30) male kho-kho players form medik district, players were belonging from Osmania university area randomly selected as the subject for this study. The subject age was ranged between 18 to 22 years selected for the present study was Sports Competitive Anxiety Test (SCAT) BY R. MRARTIN. 1990 was used as criterion.

Selection of Variable:

The variable selected for this study was as follows:- 1-Sports Competition Anxiety Test.

Statistical Technique:

For the purpose of analysis for data descriptive statistics (mean and standard deviation) and independent's test was applied to compare the sports competition anxiety between Hyderabad and Medikdistrict male kho-kho players. The level of significance was set at 0.05.

Significance of Differences of Mean, Standard Deviation and T value on sports competition Anxiety Test between Hyderabad and Medak district male kho-kho players

Group	Sample Size	Mean	S.D	"t" Vale
Hyderabad	30	19.25	4.02	3.62
Medak	30	21.50	3.45	

Table no. 1 indicates that there was a significant difference between the means of male kho-kho players of Hyderabad sistrict and mediksistrict players on the scores of competition anxiety test score since the obtained value of "t" 3.62 was higher than the tabulated value of "t" 1.99 which was required Tobe significant at 78 degree for freedom with 0.05 level of significance.

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The Comparison Of Health Status Between Active And Non Active Girls Student Of Osmania University, Hyderabad

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Introduction

Physical fitness refers to a set of attributes that people have or achieve that relate to the ability to perform physical activity. These attributes include components of fitness that may or may not relate to health-related physical fitness. Health-related fitness relates to those components of fitness that are affected by habitual physical activity and relate to health status. As mentioned above, they include aerobic functioning, body composition, and musculo skeletal functioning. The BPFT includes test items that measure the extent to which these attributes are achieved. Physical activity consists of bodily movement produced by skeletal muscle. The primary role of physical activity is the conditioning benefit it provides in developing health related physical fitness. Types of activities include exercise, sport, training, dance, and play. In the recent decade, a decline in physical activity and beginning of a sedentary lifestyle among college students has been observed. Sedentary lifestyle and overweight issues are major public health, clinical, and economical problems in modern societies. (Sukanta Saha 2013). In the present age of science and technology people are very alert their health and physical fitness. Each nation is encouraging games and sports to get apex performance at international level. The standard of games and sports has gained new heights in every country. Our country is also trying to get the good results to improve the health status of each citizen that is why physical education has been introduced at grass root level as a part of school curriculum, which will help the students to keep them healthy and physically fit. (Deol N.S. and Kang G.S. 2010) . Sukanta Saha (2013) conducted the study, "Somatic, body composition and anthropometric characteristics of college level men students". The independent sample t-test revealed that there were significant differences between physical education and nonphysical education students and physical education students were showed better somatotype and body composition variables than the non-physical education students. Singh M. H. and Singh K. (2009) conducted study on "The Analytical Study of Health Related Fitness of Different Types of Schools in Punjab" Keeping in mind that the Health related fitness is an important antecedent to good performance, the present study was undertaken to find out the Health related fitness between Boys and Girls of Governments and Non-Governments Schools in Punjab states., he finds, there is no significant difference between boys/girls student of govt and non-govt. schools in Punjab in relation to their health related fitness. Barkha (2004) conducted the study "The comparative study of health related fitness among Physical Education students and non-physical education students" in this study investigator finds significant difference among them.

Objective of the study

The study is to determine the Comparison of Health Status between Active and Non Active Girls Student of Osmania University, Hyderabad

Hypothesis:

There may not be any significant difference between active and non active girls students of Osmania University, Hyderabad in relation health status.

Material and Methods

The purpose of the study was to find out the difference of selected body composition variables between active and non active girls student of Osmania University, Hyderabad. Total 100 girl students was selected as sample further these were divided into 50 active and 50 non active girl students which were selected from the Osmania University, Hyderabad. The age ranges between 20 to 24 years. Variables and criterion measures Body composition Variables: Trunk subcutaneous fat %, Body fat %, visceral fat level, Body mass index (BMI), Basal Metabolic rate (BMR), Skeletal Muscle % It was measured with the help of HBF-361 bio electrical impedance machine.

Statistical Consideration: The 't' test was applied to compare the mean scores of the two groups.

Results & Discussion:

The t-test was applied to the selected Body composition variables and the results pertaining to it are presented below in tables.

Table 1: Visceral Fat Level % Body Composition of Active and Non Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	3.186	1.702	0.5928
Non Active students	2.971	1.294	

Level of significance is 0.05 Tabulated Value = 1.667 (df =98)

The table 1 reveals that the Visceral fat of active students Mean is 3.186, S.D. 1.702 and non-active students Mean 2.971, S.D. 1.294 and 't' value is 0.5928. There was no significant difference found between active and non-active girl students.

Table 2: Trunk Subcutaneous Fat % Body Composition of Active and Non-Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	20.4	4.24	0.435
Non Active students	20.79	3.34	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The table 2 show that the Trunk subcutaneous fat of active and non-active students Mean is 20.4, 20.79 and S.D. 4.24, 3.34 and 't' value is 0.435. There was no significant difference found between active and non-active girl students.

Table 3: Body Fat % Body Composition of Active and Non-Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	28.11	4.20	1.3522
Non Active students	29.37	3.56	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The table 3 show that the Body fat % of active and non-active students Mean is 28.11, 29.37 and S.D. 4.20, 3.56 and 't' value is 1.3522. There was no significant difference found between active and non-active girl students.

Table 4: Body Mass Index (BMI) Body Composition of Active and Non Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	21.84	3.21	0.407
Non Active students	21.56	2.48	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The table 4 show that the BMI of active and non-active students Mean is 21.84, 21.56 and S.D. 3.21, 2.48 and 't' value is 0.407. There was no significant difference found between active and non-active girl students.

Table 5: Basal Metabolic Rate BMR Body Composition of Active and Non-Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	1182.74	128.22	0.4413
Non Active students	1194.66	95.21	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The table 5 show that the BMR of active and non-active students Mean is 1182.74, 1194.66 and S.D. 128.22, 95.21 and 't' value is 0.4413. There was no significant difference found between active and non-active girl students.

Table 6: Skeletal Muscle %Body Composition of Active and Non Active Girl Students of Osmania University, Hyderabad.

Group	Mean	S.D.	't' Value
Active Students	26.514	1.62	0.829
Non Active students	26.20	1.54	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The table 6 show that the Skeletal muscle % of active and non active students Mean is 26.514, 26.20 and S.D. 1.62, 1.54 and 't' value is 0.829. There was no significant difference found between active and non-active girl students.

Findings & Conclusion

The analysis of data revealed that there was no significant difference was found in all the body composition variables (Visceral fat level %, Trunk subcutaneous fat %, Body fat %, Body mass index (BMI), Basal Metabolic rate (BMR), Skeletal Muscle %).The reason of the insignificant difference in above mention variables may be the non-active girls are not directly involved in physical activities but they are indirectly involved in physical activities in their daily routine work such as playing in peer group, walking, cycling and doing domestic work.

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Daily Life Physical Activity And Health Related Quality Of Life Among Young Adult Males

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Abstract

The valid and appropriate indicator of public health, which has been highly acknowledged is the health related quality of life (HRQOL). However there is scarcity of data regarding the daily life physical activity and HRQOL among the young adult males. The aim of the present study was to explore the association of HRQOL with the daily life physical activity. **Methods:** A cross sectional study was conducted to investigate the HRQOL of 600 college going adult male's using simple random sampling method. One way ANOVA were used to analyze the HRQOL group differences based on daily life physical activity. **Results:** There were significant group differences based on the daily life physical activity and among the physical component summary (PCS), mental component summary (MCS) and total health scores (THS) as shown by the univariate analysis ($P < 0.005$). **Conclusion:** In the present study using SF-36 instrument and IPAQ long form, we assessed the relationship between HRQOL and daily life physical activity. The results indicate that daily life physical activity affect the HRQOL among the young adults. **Keywords:** HRQOL, SF-36, IPAQ, lifestyle, young adult males.

Introduction

Health has been defined as a state of complete mental, physical and social-wellbeing and not merely the absence of disease or infirmity by the WHO [1]. It is rightly said that the wealth of a nation resides in the health of its citizens. No doubt modernization and technological advancements have raised our standard of living but at the same time offers a sedentary life style which is destroying the good conditions of a human body [2]. However the standard of living should not be confused with the quality of life. The overall impact of a medical condition on the physical, mental and social well-being of an individual has been defined as the HRQOL [6]. Research of recent time has a goal to test the strategies so as to improve the HRQOL in general population, such as increased physical activity. Doing physical activity on a regular basis is an important factor for the prevention of non-communicable diseases (NCD's) [8] such as coronary artery disease (CAD) cancers, diabetes and stroke of various types. Physical activity provides both physiological as well as psychological benefits to individuals of various age groups [9]. Several aspects of quality of life are associated with the regular physical activity and this association has been consistently reported in the literature [13,14,15]. However there is limited evidence available about the relationship between DLPA with specific dimensions of HRQOL among adult males. The present study assessed the association between DLPA and HRQOL. In this study we aimed to explore the self-reported HRQOL among young adult males using the SF-36 instrument; association between DLPA and HRQOL.

Materials And Methods

A cross sectional survey of a random sample of young male adults selected from five different regions (viz. Pulwama, Shopian, Srinagar, Ganderbal and Baramulla) of the Kashmir valley of Jammu & Kashmir state was conducted. Young adult males in the present study refer to those who were pursuing their Bachelor's Degree in five different Government Degree Colleges. A total of 600 adults were selected for this study through simple random sampling method, however only 516 samples were used

Scale		Mean	SD
PCS		54.9716	5.48399
	PF	54.3066	4.51445
	RP	50.8864	8.14457
	BP	56.4756	8.39315
	GH	52.4822	9.27754
MCS		49.8312	9.72956
	VT	57.0142	9.94134
	SF	49.4701	9.34240
	RE	48.7060	9.74218
	MH	51.3399	10.86453
THS		52.3968	6.14548

for the statistical analysis because the data obtained from 84 samples were not complete (Questionnaire left incomplete). For the present study the age of adult males ranged between 18-25 years which was confirmed from the admission registers of the respective colleges.

Measurement tools: A questionnaire survey was conducted during April-November 2015. The questionnaire involved two parts. The first part included the long version of IPAQ. However the sample selected for the study were college going students, hence the Part I of the IPAQ which is job related physical activity was not taken into consideration. Based on the IPAQ guidelines samples were categorized into LLPAG, MLPAG and HLPAG. The second part was the HRQOL measurement scale; the SF-36. The SF-36 is a reliable and validated instrument for the measurement of HRQOL.

Statistical analysis: The collected data was treated statistically by using the SPSS for windows version 20. The statistical description of frequencies, percentages mean and standard deviation were used for DLPA. After calculating the descriptive statistics One Way ANOVA was used to assess the group differences with respect to their statistical significance.

Results

Characteristics of the participants

Total 600 participants were randomly selected, among them 516 (86%) samples were included in the data analysis. Table 1 shows that 119 (23.1%) were 18 years of age, 116 (22.5%) were 19 years of age, 20 and 21 years of age were 83 (16.1%) both, 27 (5.2%) were 22 years of age, 34 (6.6%) were 23 years of age, 26 (5%) were 24 years of age and 28 (5.4%) were of 25 years age. The table further shows the frequency of the samples based on the DLPA.

Table 1 Frequency distribution of adult males as per age and DLPA (N=516) Table 2 HRQOL of Young Adult Males

Factor	Groups	N	%
Age	18	119	23.1%
	19	116	22.5%
	20	83	16.1%
	21	83	16.1%
	22	27	5.2%
	23	34	6.6%
	24	26	5.0%
	25	28	5.4%
	Total	516	100.0%
	Daily Life Physical Activity	LLPAG	34
MLPAG		154	29.8%
HLPAG		328	63.6%
Total		516	100.0%

HRQOL of young college going adult males and Univariate Analysis.

Table 2 shows the scores of HRQOL among young college going adult males. The PCS has a mean value of 54.97 with standard deviation of 5.48, MCS has a mean value of 49.84 with SD of 9.72 and THS has the mean value of 52.39 and SD 6.14. Association between DLPA and HRQOL is shown in table 3. The table shows significant differences ($P < 0.05$) between DLPA and both PCS and MCS of HRQOL. The F value for PCS, MCS and THS is 12.23, 12.758 and 20.688 respectively which is very much significant at 0.05 level of confidence.

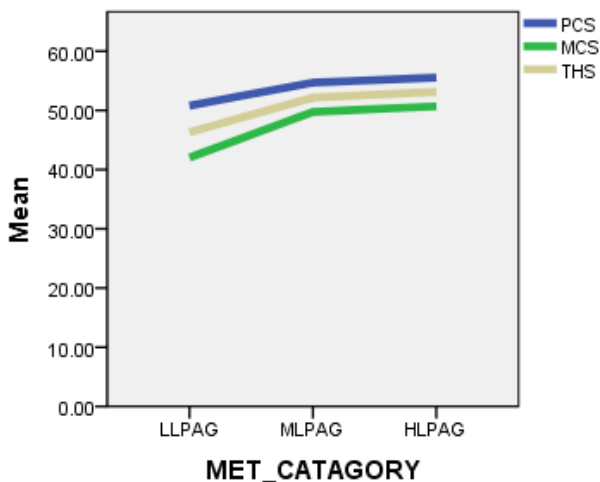
Table 3 Association of life-style factors with the PCS, MCS and THS of the HRQOL.

Factors	Groups	Health Related Quality of life					
		PCS Score		MCS score		TH Score	
		Mean	SD	Mean	SD	Mean	SD
DLPA	LLPAG	50.80	7.84	42.02	8.86	46.30	6.80
	MLPAG	54.69	5.91	49.74	9.12	52.15	5.86
	HLPAG	55.53	4.75	50.68	9.65	53.13	5.85
	F	12.230		12.758		20.688	
	P	0.000		0.000		0.000	

Discussions

The present study investigates the relationship between DLPA and HRQOL among a sample of young adult males. The results of the study explored that DLPA have a strong association with the HRQOL of young adults. The evidence regarding the healthy benefits of DLPA is overwhelming and continues to accumulate since ancient times [37,38]. Regular physical activity has structured and beneficial functional effects on cardiovascular system [39]. Taking part in various types of physical activities can improve the HRQOL, is suggested by the findings of this study. Physical activity can reduce the risk of various heart diseases and ultimately overall mortality [28]. Physical activity influences the most structural components of the musculoskeletal system in a positive way [40] and muscular weakness is the prime factor for a decrease in general health [41]. Besides physiological benefits, DLPA have psychological benefits as well which include relaxation, increased social contact, promotion of positive mental health, psychological well-being and cognition functioning [42]. Physical fitness as a result of physical activity is closely associated with good health [43]. These benefits of PA allow the physically active person to have physiological, functional, and psychological fitness and consequently higher HRQOL.

Figure 1. Line graph of PCS, MCS and THS on the basis of Physical activity.



Conclusions:

Despite several limitations like the indirect measurements of physical activity and the fact that the data are all self-reported the present study is the first to provide association of DLPA with the HRQOL among young adult males. Although there is need for further research in other parts of the country, all those concerned with the public health are urged to develop and implement effective strategies to increase physical activity and a suitable change in life-style factors so as to improve the HRQOL among young adults based on the findings of this study.

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An Experimental Study on Efficacy of Yogic Exercise Program on Short Distance Speed of Kho-Kho Players

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Abstract

The main objective of the present study is to assess the efficacy of yoga exercises program of short duration on short distance speed of male kho-kho players. To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects was done from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group. The subjects of experimental group additionally received three months of yoga exercise training program while subjects grouped into control group did not receive such programme except their usual routine training. Timings on 50m dash was recorded twice i.e. before the commencement of study and immediately after completion of three months yogic exercise program. Results indicate that three months yogic exercise regime has been instrumental in improving the 50m dash timings of male kho-kho players. Therefore it may be concluded yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players. Keywords : Yoga, Speed, Kho-kho

Introduction

Kho-kho is traditional Indian sport and require quick activities across short distances. The nature of kho-kho requires rapid acceleration, hence ability to cover short distance in less time is important. When the distance is shorter, a player needs to get off the blocks quickly and accelerate rapidly. Since kho-kho is a popular sport in India, so many researchers like Dhondge (2011), Singh and Singh (2013), Rana (2013), Jaiswal (2014), Tiwari and Agashe (2016) have conducted scientific studies on factors related to performance of kho-kho players. Surprisingly yoga did not feature in any of the studies although efficacy of yoga in enhancement of physical fitness parameters has been documented quite extensively [Bhavanani and Udupa (2003), Gabbett, T., & Benton, D. (2007), Singh et al. (2011)]. To fill this void, the present study was planned to investigate the efficacy of three months yoga program on short distance speed of male kho-kho players.

Hypotheses

It was hypothesized that three months yoga exercise programme will significantly improve the 50 meter dash timings of male kho-kho players.

Methodology :-

The following methodological steps were taken to conduct the study.

Sample :

To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects comprise of male kho-kho players from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group.

Tools: 50 M Run were used for the study.

Analysis of Data:

Table No. 1: Pre and Post-Test Statistics on 50 meter Dash Timings of Selected Male Kho-Kho Players belonging to Experimental and Control Group

** Significant at .01 level; NS - Not Significant

Groups	Before Study Mean±S.D.	Period	After 03 months Mean±S.D.	Mean Difference	't'
Experimental (N=50)	6.6722 ± 0.12		6.6178 ± 0.07	0.0544	6.23**
Control (N=50)	6.6804 ± 0.09		6.6722 ± 0.11	0.008	0.79(NS)

Perusal of table 1 shows no significant change in 50 meter dash timings of male kho-kho players belonging to control group ($t=0.79$, $p>.05$). In contrary to this, male kho-kho players belonging to experimental groups showed improvement in 50m dash timings in the course of study period i.e. taking part in three months yoga program ($t=6.23$, $p<.01$)

To compare pre-post changes in 50m dash timings of male kho-kho players from experimental and control group, gain score was computed and compared.

Results shown in table 2.

Table No. 2: Comparison of Gain Score on 50 meter Dash Timings between Experimental and Control Group

	Experimental (N=50)	Group	Control (N=50)	Group	't'	Sig.
Mean Gain Score	-.0544		-.0082		3.51	.01

A perusal of entries reported in table 2 indicate that time taken to finish 50 meter dash was found to be significantly reduced ($M = -.0544$) in male kho-kho players belonging to experimental group as compared to male kho-kho players belonging to control group ($M = -.0082$). $t=3.51$, $p<.01$

Results

On the basis of statistical analysis it was observed that time to complete 50 meter dash was significantly reduced in male kho-kho players from experimental group as compared to their counterparts from control group between time span of study.

Discussion

The result indicate improved timings on 50 meter dash of male kho-kho players after participating in specifically designed three months yoga program. The reason may be attributed to improved functioning of central nervous system which enables players to quickly get off the blocks.

Conclusion

It was concluded that yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players.

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Relationship Among Age, Height, Weight And Haemodynamic Variables At Rest Of Cricket Players

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Abstract:

The purpose of this study was to observe Relationship among Age, Height, Weight and Hemodynamic variables at Rest of fewer than 19 years cricket players. Materials & methods: There was thirty two (N=32) trained male cricketers for the study. Anthropometric rod, Weighing machine & Digital Sphygmomanometer were used. Results: The mean \pm SD of Age 17. 38 \pm 0.97 years, Height 173.04 \pm 8.15 cm, Weight 62.22 \pm 8.87 kg. The mean pulse rate, systolic blood pressure, diastolic blood pressure, pulse pressure, mean atrial pressure, rate pressure product, stroke volume and cardiac output of cricketers resting was 76.75 \pm 5.84 beats/min. 15.25 \pm 3.71 mmHg, 79.13 \pm 3.87 mmHg, 46.25 \pm 5.34 mmHg, 94.45 \pm 2.80 mmHg, 96.14 \pm 7.55 beats/min. mmHg, 60.22 \pm 4.59 ml/beat and 4.61 \pm 0.54 L/minute respectively. Conclusion: The resting mean arterial pressure was statistical significant positively related with systolic blood pressure and diastolic blood pressure.

Key words: Systolic blood pressure, Mean Arterial pressure, Stroke volume

Introduction

The game of cricket has evolved considerably since it was first played in England some 400 years ago (Eagar, 1986). Cricket like many other sports has changed significantly over the years. The game has seen substantial changes in the nature of the activity over the years. The nature of the game has also seen dramatic changes, from it being a fairly subdued form of recreation to highly competitive international sports. Modern cricket matches typically take two forms, Limited over (1-day) and First class (4-5 day) matches. At the 'elite' level, cricket comprises of 'One-day international' matches (ODI) and 'Test' matches. One-day matches being more intense (Noakes and Durandt, 2000) but of shorter duration, while the intensity of test matches is very less but the duration significantly increases (Fletcher, 1955). 'T20' is a short form of cricket. At professional level, it was originally introduced by the 'England and Wales Cricket Board' (ECB) in 2003 for the inter-county competition in England and Wales (Wikipedia, 2015). Depending on the nature of cricket, intermittent activities such as batting, bowling and fielding for long duration of time requires significant anaerobic fitness and operates within a well-developed aerobic system. Thus, aerobic capacity and cardiovascular variables are of great interest to those involved with cricket, as they heavily rely on the player's ability to move quickly and powerfully. The aerobic and anaerobic metabolism in sports/games depends on the duration and intensity of the activity. Apart from the metabolic changes, the intensity of the activity also has an influence on the cardiovascular system, especially on heart rate. The degree of increase in the heart rate depends on the intensity of the load (Astrand & Rodahl, 1986).

Materials & Methods

Thirty-two (N=32) trained male cricketers of Punjab cricket academy volunteered for this study. Equipment was used 1 Anthropometric rod 2 weighing machine 3 digital sphygmomanometer 4 Stethoscope. The study anthropometric measurements on the subjects of the present study were taken by using standardized procedure as described by Weiner & Laurie (1969). The Queens's college step test is one of many variations of step test procedures used to determine aerobic fitness. Vo2 max test we used a wooden step bench that is 16.25 inch, A Stopwatch and Metronome

Results Table 1. Mean \pm SD of Hemodynamic Variables of Cricketers

Variables	Mean \pm SD
Age (years)	17.38 \pm .97
Height (cm)	173.04 \pm 8.15
Weight (kg)	62.22 \pm 8.87
Pulse Rate (beats/minute)	76.75 \pm 5.84
Systolic Blood pressure (mmHg)	125.25 \pm 3.87
Diastolic Blood pressure (mmHg)	79.13 \pm 3.87
Pulse Pressure (mmHg)	46.25 \pm 5.34
Mean Arterial pressure (mmHg)	94.45 \pm 2.80
Rate Pressure Product (beats./min./mmHg)	96.14 \pm 7.55
Stroke volume (ml/minute)	60.22 \pm 4.59
Cardiac Output (L/minute)	4.61 \pm 0.54

The mean age, height and weight of cricketers was 17.38 \pm .97 years, 173.04 \pm 8.15 cm and 62.22 \pm 8.87 Kg respectively. The mean Pulse Rate, Systolic Blood Pressure, Diastolic Blood Pressure, Pulse Pressure, Mean Arterial Pressure, Rate Pressure Product, Stroke Volume and Cardiac Output of cricketers at resting was 76.75 \pm 5.84 beats/minute, 125.25 \pm 3.71 mmHg, 79.13 \pm 3.87 mmHg, 46.25 \pm 5.34 mmHg, 94.45 \pm 2.80 mmHg, -196.14 \pm 7.55 beats.min .mmHg, 60.22 \pm 4.59 ml/beat and 4.61 \pm 0.54 L/minute respectively (Table 1).

Table 2. Correlations among Age, Height & Weight

Variables	Height	Weight
Age	.04	.22
Height	-	.68*

**Significant at $p < 0.01$; *significant at $p < 0.05$

Table 2 shows the relationship among age, height and weight of cricketers. It was found that body height of cricketers was statistical significant positively related with their body weight ($r= 0.68$ $p<0.01$).

Table 3. Correlations among Age, Height, Weight & Hemodynamic Variables at Rest

Variables	Pulse pressure resting	Systolic blood pressure resting	Diastolic blood pressure resting	Pulse pressure resting	Mean arterial pressure resting	Rate pressure Product resting	Stroke Volume resting	Cardiac output resting
Age	-.13	.26	.05	.17	.12	-.09	-.05	-.16
Height	-.27	-.12	-.31	-.30	.23	-.31	-.34	-.41*
Weight	-.26	-.01	.14	-.11	.15	-.23	-.17	-.28
Systolic blood pressure resting	-.09	—	-.02	.71**	.42*	.29	.41*	.19
Diastolic blood pressure resting	-.17	-.02	—	-.70**	.89**	-.17	-.86**	-.65**
Pulse pressure resting	.05	.71**	-.70**	—	-.32	.32	.89**	.59**
Mean arterial pressure resting	-.22	.42*	.89**	.32	—	.05	.60**	-.52**
Rate pressure product resting	.92**	.29	-.17	.32	-.05	—	.36*	.83**
Stroke Volume resting	.22	.41*	-.86**	.89**	-.60**	.36*	—	.76**
Cardiac output resting	.78**	.19	-.65**	.59**	-.52**	.83**	.76**	—

**significant at $p < 0.01$; *significant at $p < 0.05$

The cardiac output of cricketers at rest was found statistical significant positively related with pulse pressure ($r= 0.59$ $p<0.01$), rate pressure product ($r= 0.83$ $p<0.01$) and stroke volume ($r= 0.76$ $p<0.01$) but negatively with body height ($r= -0.41$ $p<0.05$), diastolic blood pressure ($r= -0.65$ $p<0.01$) and mean arterial pressure ($r= 0.52$ $p<0.01$). It was also found that at rest the stroke volume of cricketers statistical significant positively related with systolic blood pressure ($r= 0.41$ $p<0.05$), pulse pressure ($r= 0.89$ $p<0.01$), mean arterial pressure ($r= 0.60$ $p<0.01$), rate pressure product ($r= 0.36$ $p<0.05$) and cardiac output ($r= 0.76$ $p<0.01$) but negatively with diastolic blood pressure ($r= -0.86$ $p<0.01$). The resting rate pressure product was statistical significant positively related with stroke volume ($r= 0.36$ $p<0.05$) and cardiac output ($r= 0.83$ $p<0.01$) (Table 3). The resting mean arterial pressure was statistical significant positively related with systolic blood pressure ($r= 0.42$ $p<0.05$) and diastolic blood pressure ($r= 0.89$ $p<0.01$) but negatively with stroke volume ($r= -0.60$ $p<0.05$) and cardiac output ($r= -0.52$ $p<0.01$) (Table 3). The resting pulse pressure was statistical significant positively related with systolic blood pressure ($r= 0.71$ $p<0.01$), stroke volume ($r= 0.89$ $p<0.01$) and cardiac output ($r= 0.59$ $p<0.01$) but negatively with diastolic blood pressure ($r= -0.70$ $p<0.01$) (Table 3).

Discussion

In the present study, the cardiac output of cricketers at rest was found statistically significant positively related with pulse pressure ($r = 0.59$ $p < 0.01$), rate pressure product ($r = 0.83$ $p < 0.01$) and stroke volume ($r = 0.76$ $p < 0.01$) but negatively with body height ($r = -0.41$ $p < 0.05$), diastolic blood pressure ($r = -0.65$ $p < 0.01$) and mean arterial pressure ($r = 0.52$ $p < 0.01$). The resting stroke volume of cricketers was also found statistically significant positively related with systolic blood pressure ($r = 0.41$ $p < 0.05$), pulse pressure ($r = 0.89$ $p < 0.01$), mean arterial pressure ($r = 0.60$ $p < 0.01$), rate pressure product ($r = 0.36$ $p < 0.05$) and cardiac output ($r = 0.76$ $p < 0.01$) but negatively with diastolic blood pressure ($r = -0.86$ $p < 0.01$). The resting mean arterial pressure was statistically significant positively related with systolic blood pressure ($r = 0.42$ $p < 0.05$) and diastolic blood pressure ($r = 0.89$ $p < 0.01$) but negatively with stroke volume ($r = -0.60$ $p < 0.05$) and cardiac output ($r = -0.52$ $p < 0.01$) (Table 3). At rest the cardiac output is about 5L/min. During intense exercise this can increase to 20-40L/min (McArdle et al., 2000). In untrained individuals, maximal cardiac output may be 14-20L/min compared to 25-35L/min in trained subjects. In large, elite athletes, maximal cardiac output can be as high as 40L.min (Wilmore & Costill 2005). At rest a typical systolic blood pressure in a healthy individual ranges from 110-140mmHg and 60-90mmHg for diastolic blood pressure. During exercise systolic pressure, the pressure during contraction of the heart (known as systole) can increase to over 200mmHg and levels as high as 250mmHg have been reported in highly trained, healthy athletes (Wilmore & Costill 2005). Diastolic pressure on the other hand remains relatively unchanged regardless of exercise intensity. In fact an increase of more than 15 mm Hg as exercise intensity increases can indicate coronary heart disease and is used as a marker for accessing an exercise tolerance test. Diastolic blood pressure remains relatively constant because of peripheral vasodilatation, which facilitates blood flow to the working muscles. The rise in systolic blood pressure and the lack of a significant change in diastolic blood pressure cause the mean arterial pressure (MAP) to rise only slightly, following the pattern of systolic blood pressure. The increase in mean arterial pressure is determined by the relative changes in cardiac output and total peripheral resistance. Since cardiac output increases more than resistance decreases, mean arterial pressure increases slightly during dynamic exercise. However, the increase in mean arterial pressure would be much greater if resistance did not decrease. However, at a maximal exercise intensity systolic blood pressure is decreased compared to pre-training (Coyle et al., 1986; Clausen 1977). It is interesting to note that although resistance exercises can raise systolic and diastolic blood pressure significantly during the activity, it too can lead to a long-term reduction in blood pressure (Hagberg et al., 1984).

Conclusion

The cardiac output of cricketers at rest was found statistically significant positively related with pulse pressure, rate pressure product and stroke volume but negatively with body height, diastolic blood pressure and mean arterial pressure. The resting rate pressure product was statistically significant positively related with stroke volume and cardiac output. The resting mean arterial pressure was statistically significant positively related with systolic blood pressure and diastolic blood pressure.

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An Assessment Of Physical Education Programmes, Sports Programmes, Achievements Of Games And Sports Performances In The Universities Of Andhra Pradesh

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Abstract

The primary purpose of the study was to assessment the physical education and sports programmes carried out for boys and girls in the universities of Andhra Pradesh state along with their achievements in inter university competitions for a period of ten years form 1999-2008.To achieve the purpose of the study all the thirteen universities in the state of Andhra Pradesh were taken into account for the analysis. For the collection of data in respect of the physical education programmes, sports programmes and achievements, standardized questionnaire was used. Documental and personal interview techniques were carried out for collecting detailed information. For comparing the selected variables one way analysis of variance (ANOVA) was employed followed by Scheffe's post hoc test whenever F ratio was found significant. Physical education programmes was better in some universities, sports programmes was also better in some universities and similarly sports achievement also better in some universities. Full detailed results and findings will be discussed in the paper.

Key words: Physical education programmes, Sports programmes and Sports achievements.

Introduction

Science plays an important role in all phases of human life. All the different branches of sports sciences help to the performance in a big way at higher level. Lack of scientific backup and failure to incorporate the scientific findings lead to unfruitful results. The countries which have implemented the scientific programmes at the school and college levels excelled in their performance at various range. Colleges and universities are the place where the youths get ample opportunities to participate in physical education to general education carries as much as other academic realisation of the importance of physical education and sports programmes is to motivate the sports persons in different ways like offering grace marks, reservation of seats under sports quota, scholarships, merits and awards. The state of Andhra Pradesh is a talented youths who produced outstanding results in the field of sports and games to lift the glory of the state as well as the nation. The universities in Andhra Pradesh played a predominant role in this regard. The effective physical education and sports programmes carried out in the state of Andhra Pradesh by the universities brought remarkable achievement for the state in the all India inter university tournaments, nationals and even in International competition. Considering the above factors the investigator was motivated to make an attempt to assess the physical education programmes, sports programmes and achievement of sports performance of the universities of Andhra Pradesh for providing an overall vision to the sports personalities. The primary purpose of this study was to the physical education programmes carried out in various universities of Andhra Pradesh state, besides the sports programmes carried out. The secondary purpose of the study was, the sport achievements of boys and girls in the universities in Andhra Pradesh state in the all India inter university competitions.

The investigator's aim to know the contribution of each university in the above programmes in order to bring to light, the measures taken by each university to uplift the standard of the performance in All India level.

Methodology

For this study thirteen universities in Andhra Pradesh state were chosen. The variables selected were physical education programmes, sports programmes, achievements of boys in all India inter university competitions and achievements of girls of each university in the all India inter university competitions. The physical education programmes included refresher courses, seminars, workshops, exhibitions, mountaineering, adventurous sports and facilities. The sports programmes included inter zone competitions, open tournaments, Independence Day celebrations, festival tournaments achievements included in the inter university disciplines. The data pertaining to the study were collected by using standardised questionnaire, personal interview techniques and documental evidence from each university. The collected data were converted to numerical score for statistical treatment for comparing to chosen variables among the universities. One way analysis of variance (ANOVA) was used for comparison. Whenever the F-ratio was found significant Scheffe's post hoc test was used to find out the paired mean differences.

Conclusions

Within the limitations of the study the following conclusions were drawn.

Physical Education Programmes

Physical education programmes carried out by Osmania University was found better than all other universities in Andhra Pradesh. The physical education programmes carried out by Andhra University was good followed by Nagarjuna University. The physical education programmes carried out in Kakatiya University, JNTU, Sri Venkateswara Universities showed average standard.

The physical education programmes carried out by the Sri Krishan Devaraya University, NIT (Deemed) university, Sanskrit universities were very low. There was no physical education programme in Agricultural University, Dr. NTR Health University, University of Hyderabad, Padmavathy Mahila Universities.

Sports Programme

Sports programmes carried out in the Andhra University was found better than all other University in Andhra Pradesh state.

Sports programmes carried out in Osmania University and Kakatiya University were equally good.

Sports programmes carried out in JNT University, Sri Venkateswara University, Nagarjuna University showed average standard.

Sports programmes carried out in Sri Krishna Devaraya University and NIT (Deemed) University were low.

Absolutely there were no sports programmes in Agricultural University, Dr. NTR Health University, University of Hyderabad, Sanskrit University and Padmavathy Mahila Universities.

Sports Achievements for Boys

Sports achievements of Osmania University for boys were found better than all other Universities of Andhra Pradesh.

It was found out that the achievements of Andhra University boys were comparatively good, followed by Nagarjuna University.

Sports achievements of Kakatiya University, JNT University, Sri Venkateswara University, and Sri Krishna Devaraya University were average standard.

Sports achievement of NIT (Deemed) University, Sanskrit University and Dr. NTR Health University were very low for boys.

Sports achievement of Agricultural University, University of Hyderabad for boys in inter University was very poor

Sports Achievements for Girls

Andhra University girls were found better in sports achievements compared to all other Universities.

Osmania University and Andhra University stood next to Nagarjuna University in sports achievements in girls section.

The sports achievements of JNT University, Kakatiya University, and Sir Venkateswara University were average standard.

The sports achievement of Sri Krishna Devaraya University and Agriculture University and Dr. NTR Health University were comparatively very low.

NIT (Deemed) University and Padmavathy Mahila Universities work very poor in the girls inter University competitions.

Sports achievement of University of Hyderabad for girls in inter University was found nil.

Recommendations

On the basis of the present study the following recommendations were made:

Steps are to be taken to introduce compulsory physical education programmes in all Universities including Agriculture University, NTR University, Padmavathy Mahila University and University of Hyderabad in Andhra Pradesh. Similar study may be conducted on each University separately so that more creative solutions for the problem can be identified and rectified. Directors and coaches of Universities can make use of the results of the study to improve the functioning and achievements of their University. On the basis of the study the government of Andhra Pradesh can chalk out scientific programmes for the promotion physical education and sports among the youth of the state.

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Comparison of Agility between Kho Kho Players and Kabbadi Players of Bhadradri Kothagudem District between the age group of 14 to 16 Years

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Introduction:

The Purpose of the study is to find out the Agility among the Kho Kho Players and Kabbadi Players of Bhadradi Kothagudem District. Kabaddi is a contact team sport. It is popular in South Asia and is the state game of the Indian states of Tamil Nadu, Kerala, Andhra Pradesh, Bihar, Haryana, Karnataka, Maharashtra, Punjab and Telangana. Kabaddi is played between two teams of seven players; the object of the game is for a single player on offence—referred to as a "raider"—to run into the opposing team's half of a court, tag out as many of their defenders as possible, and return to their own half of the court—all without being tackled by the defenders. Points are scored for each player tagged by the raider, while the opposing team earns a point for stopping the raider. Players are taken out of the game if they are tagged or tackled, but can be "revived" for each point scored by their team from a tag or tackle. Kho kho is a popular tag sport from India. It is played by teams of twelve nominated players out of fifteen, of which nine enter the field, who try to avoid being touched by members of the opposing team. It is one of the two most popular traditional tag games of the South Asia, the other being Kabaddi. Apart from South Asia, it is also played by the Indian community in South Africa.

Methodology:

The sample for the present study consists of 20 Male Kabbadi Players and 20 Kho Kho Players Bhadradi Kothagudem District between the age group of 14 to 16 Years. To assess the agility Shuttle Run Test were conducted.

Agility Shuttle Run Test

purpose: this is a test of speed and agility, which is important in many sports.

equipment required: wooden blocks, marker cones, measurement tape, stopwatch, non-slip surface.

procedure: This test requires the person to run back and forth between two parallel lines as fast as possible. Set up two lines of cones 30 feet apart or use line markings, and place two blocks of wood or a similar object behind one of the lines. Starting at the line opposite the blocks, on the signal "Ready? Go!" the participant runs to the other line, picks up a block and returns to place it behind the starting line, then returns to pick up the second block, then runs with it back across the line.

scoring: Two or more trails may be performed, and the quickest time is recorded. Results are recorded to the nearest tenth of a second.

Results:

This study shows that Kho Kho Players are having better agility compare to the Kabbadi Players in shuttle Run Test.

Table-I: Mean values and Independent Samples Test of Shuttle Run Test between Kabbadi Players .

Variables	Group	Mean	SD	t	Sig(2-tailed)
Shuttle Run Test	Kho Players	15.10	0.56	2.53	0.02
	Kabbadi Players	16.48	1.20		

*Significant at 0.05 level

In Table –I the Mean Values of Shuttle Run Test of KhoKho Players is 15.10 and Kabbadi Players is 16.48 The Average Mean of Kho Kho Players in Shuttle Run Test is lesser than the Kabbadi Players.

Discussion:

Speed and agility is one of the main fitness components, important for success in many sports. For some athletes such as Track and Field sprinters, sprint swimmers, cyclists and speed skaters, speed is the most important aspect of fitness. speed requires a training program that focuses on leg strength and power, with appropriate technique training to best utilize your strength and power development. Agility plays an important role in Kho Kho compare to Kabbadi.

Conclusion:

- 1.It is concluded that Kho Kho Players are having better agility than Kabbadi Players
- 2.Conditioning Exercises plays a major role for improvement of agility.
3. Sprint training is not all about running fast. It is important to have a good fitness base to build speed upon, and to have the capacity to train regularly. Flexibility is important so that good running form can be achieved, exercises can be performed over the full range of motion and to reduce the incidence of injury.

Recommendations:

1. Similar studies can be conducted on other sports and Games and among females.
- 2.This study also helps the physical educators and coaches to improve their training regime to excel in Sports and Games.

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Socio economic Status Effect On Sport Performance Of Non Achiever And Achiever Shooters.

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Abstract

The purpose of the study was to find out the socio-economic status effect on sport performance of Achiever and Non Achiever Shooters belong to Punjab State. Total 60 players samples (NonAchiever =30(below 8th Position Men and Women Pistol and Rifle), Non Achiever =30 first 8 position Men and Women Pistol and Rifle)) Inter college level Shooters were taken from inter college Shooting tournament Punjabi university Patiala held at Punjabi University patiala. The Socioeconomic status questionnaire prepared and validated by Aghase and Helode (2002) was used for the purpose of data collection. To find out the significant effect of socioeconomic status on sport performance of Inter college level Man/Women and Women Shooters belong to Punjabi University Related Colleges, means, standard deviations and t-ratios were computed Results of the study indicated the positive socioeconomic status effect on the sport performance of Inter college level Man/Women and Women Shooters. Significance of difference was also observed in sport performance between Non Achiever and Achiever Shooters of high, mediocre and low socioeconomic status. **Keywords:** Shooters, Socioeconomic Status, sport performance, Inter college level.

Introduction

Sports and physical education play an important role in human resource development. Games and other outdoor activities, properly planned and executed, promote social harmony, discipline and increased productivity. These activities develop in students right attitudes and values and help them grow into balanced, integrated and healthy citizens. Participation in physical activities and sports is a fundamental right of every citizen. Physical education and sports are essential elements of educational processes which promote among the participants health, physical fitness and quality of life (UGC report, 1987) [3]. Socio-economic factors play a vital role in an individual's performance in sports. The socioeconomic status make-up of an individual plays an important role in their achievements in every field of life. Socio-economic status also Influence on habitual physical activity (Drenowatz *et al.* 2010). Socio-economic status is an individual's or group's position within a hierarchical social structure. Socioeconomic status depends on a combination of variables, including occupation, education, income, wealth and place of residence. Sociologists often use socioeconomic status as a means of predicting behavior (Hirsch, Kett, and Trefil, 2002) [9]. Index of socio-economic status comprises of occupational status, area of residence, monthly income, type of housing, condition of house, house ownership or rental status, level of living and formal social participation (Nair, 1978) [13]. Socio-economic status of an individual may influence his opportunity, his desire to excel, his choice of activity and his success. The home environment often influences his motivation to succeed in sports and the degree to which success in this endeavor leads to inner satisfaction. Many psychological factors like socio-economic status, attitudes, motives, spectators, self concept, motivation, adjustment etc., which influence the participation and performance of sportsmen in games and sports.

Socioeconomic-status and psychological factors plays a vital role in football players to enhances the performances to achieve the player's goal (Chandrasekaran, 2010) [4] Socio economic status did not have any effect on the performance of badminton players (Attri, 2013) [1]. But the Socioeconomic status effects the team games more than Individual games (Webb,1969). Players of high socioeconomic status did not like to play Ice-Hockey, Golf and Tennis games (Stone, 1957). Socioeconomic status is a strong determining factor in both satisfaction with life domains and satisfaction of needs (Ali and Morcol, 2000) [2]. Dissimilarity was observed between team and individual game players in their high, middle and low SES. and lows core on low SES than their counter parts (Srikanth,2012) [14]. Considerable research has been conducted on the socio-economic status of sports persons, team sport versusindividual sport (Deshmukh 2013; Khan 2009; Kumar. 2013;Kour & Singh, 2014) [6, 10, 8, 11]. Sharma and Hardikar (2010) [15] reported that income reflects the living of a family. There is no doubt that type, amount and timing of food can dramatically affect sport performance. Lee and Cubbin (2002) [12] also reported that low SES teens were less physically active than high socio economic teens.University level students of low SES opt for less expensive sports and students of high SES opt for expensive sports. In all societies, it is people in high income, high education, and high status occupational groups that have the highest rates of activesports participation, attendance at sports events, and even watching of sports on television. As a consequence of choice of sports, acquisition andmaintenance of physical fitness also vary. Therefore, it is worth investigating to learn as to which SES category will be more fit physically. Physical fitness and health are related to a certain degree. Proneness to disorders and physical fitness may be associated with SES. The purpose of the study was to find out the socio-economic status effect on sport performance of inter college level Shooters belong to Achiever and Non Achiever of India.

Methodology

Selection of Subject

The present study was conducted on 30 Non Achievers and 30 Achievers inter college level Shooters held at Punjabi University Patiala Subjects were randomly, who volunteered to participate in this study.

Instrumentation

The Socioeconomic status questionnaire prepared and validated by Aghase and Helode (2002) was used for the purpose of data collection during inter college level Shooting held at Punjabi University Patiala. This questionnaire is reliable and valid instrument to determine the socioeconomicstatus for the present investigation. Total university Shooting performance record was collected from the university Coordinator of the respective competition.

Results and Discussion

To find out the significant effect of socioeconomic status on sport performance of inter college level Shooting players Male/Women. belong to Achiever And Non Achiever, standard deviations and t-ratios were computed from the collected data and data pertaining to this have been presented in table 1-4

Table 1: Descriptive Statistics of Total Shooting Performance of Non Achiever and Achiever inter college level Shooting of Different Socioeconomic Status

Region	High Socioeconomic Status			Mediocre Socioeconomic Status			Low Socioeconomic Status		
	N	Mean	Sd	N	Mean	SD	N	Mean	SD
Non Achiever	9	54.28	9.5	11	90.4	12.22	10	58.8	12.33
Achiever	8	58.67	10.35	11	91.64	11.44	11	89.10	14.2

The mean scores of total Shooting Bout performance of Achiever and Non Achiever inter college level Male/Women/Women Shooters of different socioeconomic status have been depicted in figure 1 to 3.

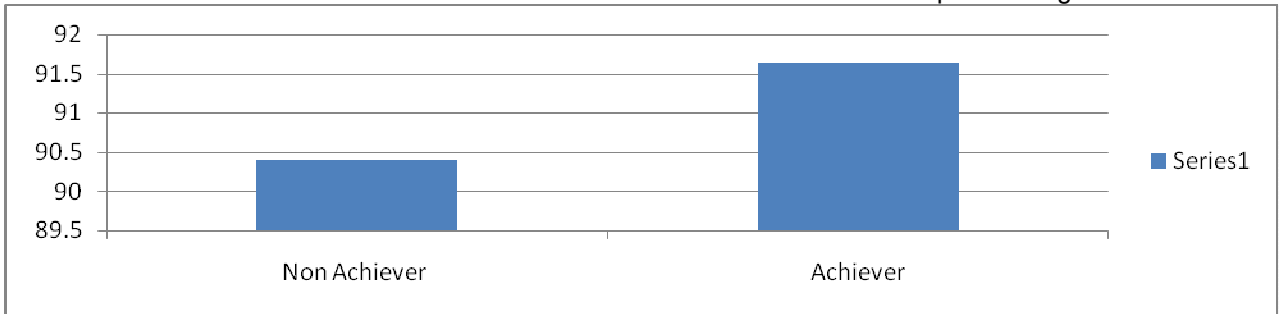


Fig 1: Mean Scores of total Shooting Bout Performance of high Socioeconomic Status inter college level Male/Women/Women Shooters belong to Achiever and Non Achiever Shooters.

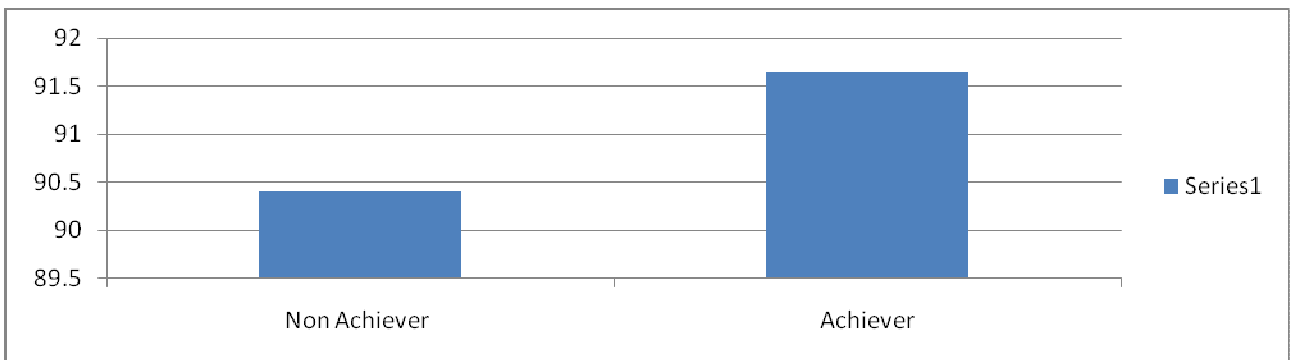


Fig 2: Mean Scores of total Shooting Bout Performance of Mediocre Socioeconomic Status inter college level Achiever Non Achiever Shooters.

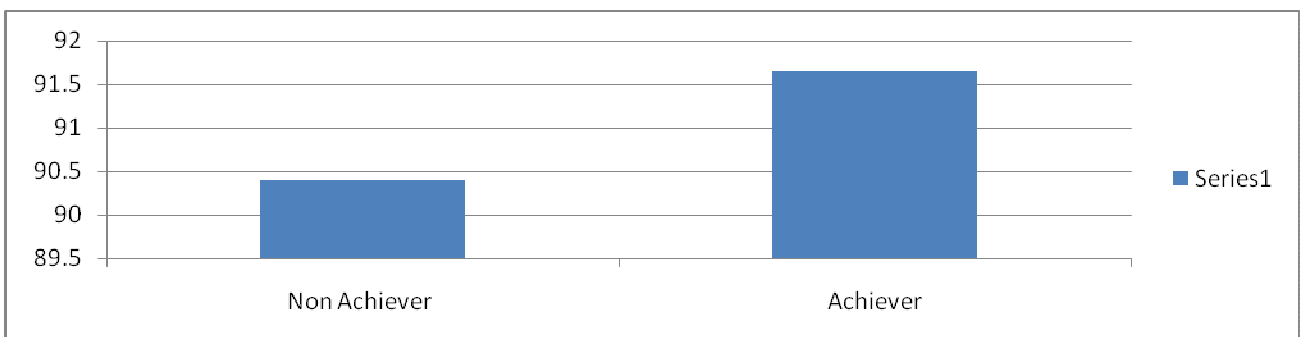


Fig 3: Mean Scores of total Shooting Bout Performance of Low Socioeconomic Status inter college level Achiever Non Achiever Shooters.

Table 2: Significance of Difference between Non Achiever and Achiever inter college level Man/WomenShooters of High Socioeconomic Status in Total Shooting bout Performance

Region	Mean	MD	σ DM	t-ratio
NonAchiever (N=9)	54.28	4.39	6.4	2.56*
Achiever (N=8)	58.67			

*Significant at .05 level, $t_{.05}(17) = 2.00$

It is evident from table 2 that the statistically significant difference was found in sport performance of inter college level Man/Women Shooters of high socioeconomic status belong Non Achiever and Achiever Shooters of Punjab, as the obtained t-values of 2.56 was high than the required t-value of t.05 (17) =2.00.

Table 3: Significance of Difference between Non Achiever and Achiever inter college level Man/WomenShooters of Mediocre Socioeconomic Status in Total Shooting Performance

Region	Mean	MD	σ DM	t-ratio
Rural (N=11)	90.4	1.54	4.45	3.56*
Urban (N=11)	91.94			

*Significant at .05 level, t.05 (22)=2.00

It is evident from table 3 that the statistically significant difference was found in sport performance of inter college level Man/WomenShooters of Mediocre socioeconomic status belong rural and urban region of India, as the obtained t-values of 3.56 was high than the required t-value of t.05 (22) =2.00.

Table 4: Significance of Difference between Non Achiever and Achiever Shooters inter college level Man/Women Shooters of Low Socioeconomic Status in Total Shooting bout Performance

Region	Mean	MD	σ DM	t-ratio
Rural (N=10)	58.8	30	4.45	5.68*
Urban (N=11)	89.10			

*Significant at .05 level, t.05 (21)=2.00

It is evident from table 4 that the statistically significant difference was found in sport performance of inter college level Man/Women Shooters of low socioeconomic status belong Non Achiever and Achiever Shooters of India, as the obtained t-values of 5.68* was high than the required t-value of t.05 (21) =5.68*.

Discussion

In our study, the proportion of the inter college level Man/Women Shooters belonged to the high socioeconomic status were 9% of Non Achiever and 8% of Achiever, Where as inter college level Man/Women Shooters belonged to mediocre socioeconomic status were 11% of Non Achiever and 11% of Achiever. The inter college level Man/WomenShooters of low socioeconomic status were found 10% from Non Achiever and 11% from Achiever. The resulted study shows the effect of socioeconomic status on Non Achiever and Achiever inter college level Man/WomenShooters. Total Shooting bout performance of inter college level Man/WomenShooters of urban region was higher than that of their counter parts. The statistical analysis indicated the dissimilarity in sport performance of inter college level Man/WomenShooters belong to rural and urban region. People's region plays a significant role in maintaining the life style and skill development in players. Encouragement, better exposure, facility and the creating awareness among different region peoples is the must to promote the performance either at high and low level among the players in sports training. Hence in the present study, urban Shooter showed their better efficiency in Shooting and produced high level performance than other their counter parts.

Conclusions

Significance of difference was observed in sport performance between Non Achiever and Achiever inter college level Man/Women Shooters of high, mediocre and low socioeconomic status. Socioeconomic status had positive effect on the sport performance of inter college level Man/WomenShooters. Achiever inter college level Man/WomenShooters of high, mediocre and low socioeconomic status had better sport performance than their counter parts.

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A Study On Strength, Power And Muscular Endurance

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Introduction :

As foundation depends on strong pillars, in the same way sports depends on strength, power & Endurance of Muscle speed exercise increase quickness, Long Distance, long duration & Many repetition in Exercise will increases endurance. As all the fine digits of hands are not equal and same, All the athletes to vary in their energy level and talent to perform certain Exercise. Talent is a lovely legacy, means is a Genetic factor. When such legacy is inherited then the high levels of performance are reached and are known as dominant motor or Biomotor abilities. The present paper is focused on two concepts of sports: One is the Theories influence strength training for sports: Body building, high Intensity raining (HIT), Olympic weight lifting, power training throughout the year & periodization of strength. Another concept is sports specific dominant Biomotor abilities.

Methodology:

In the first concept, Body Builders are mainly concerned with increased muscle size. They performs as many repetitions to exhaustion. These will be increase in muscular size due to constant movement of throw ball, Volleyball, football & some throwing enents, Athletic skills, at 100 to 180 milli seconds are performed quickly, but leg extension are three time slower at 600 milli seconds.

High intensity training (HIT): Here strength can be achieved in 20 to 30 minutes and stand against high-volume strength training, events of long, continuous duration such as long-distance, swimming, canoeing, cross country, skiing)

(Fig. Of swimming & skeing)



Power training throughout the year : If power is the dominant ability, it has to be trained throughout the year except during the training phase (off-season) They use exercise such as bounding & implements such as medicine balls & the shot. To improve power. One must improve maximum strength.

Periodization of Strength: Strength training for sports must be based in the specific physiological requirements of the sport and must result in the development of either power or muscle endurance.

Strength, Speed & Endurance:

Strength, Speed & Endurance are the important abilities for successful performance the relationships among strength, speed & endurance create crucial physical athletic qualities. A relationship of high methodical importance exists among strength, speed and endurance. For elite athletes, the relationship among strength, speed and endurance is dependent on the sport and the athletes needs.

Sports – Specific combinations of strengths speed and endurance.

Strength in sports should be viewed as the Mechanism required to perform skills and athletic actions. The reason for developing strength is not just for the sake of being strong. The goal of strength development is to meet the specific needs given sport, to develop specific strength or combinations of strength to increase athletic performance to the highest possible level. Here, the term cyclic and acyclic is necessary. Cyclic movements are repeated continuously, such as running, walking, swimming, rowing, skating, cross country skiing, cycling & canoeing. As soon as one cycle of same succession. A cyclic movements. On other hand, constantly change and are dissimilar to most other, such as in throwing events, gymnastics, wrestling, fencing etc.

Conclusion:

Almost all physical activities in corporate element of force, quickness, range of motion, exercise to overcome resistance of strength exercise. Speed, flexibility, endurance exercise with complex movements are known as co-ordination exercise.

To perform certain exercise talent is most genetic, inherited, strength, speed and endurance play an important role in reaching high level of performance and are called dominant motor and bi-motor abilities.

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- 3 December 2009 - Monte-Carlo - The following World record has recently been ratified...

Genes Talk Sports Walk

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Abstract :

Gene is the basic structural and functional unit infact it is a vehicle to carry hereditary traits. Sports and genes are like heart and beat. When genes express the sports like activities such as all bodily movements are regulated. Everybody possess a large verties of genes. A single gene express single protein which infact causes activation for specific activity. So it can be said gene express single character. There are some specific genes which works together in group in a healthy sportive body. Such genes are further transferred to their offspring. Thus a volleyball champion's son has those specific genes which were produced in father once upon a time and transferred to son as a lovely legacy.

Introduction :

The present paper is focused on two concepts of genes; one is the presence of specific genes in body which favours the body to develop into a sportive body.

Another is the importance of sports in making genes to switch on and off according to a sportsman's wish. This shows that gene can be tamed, replaced, exchanged in a sportive body as some genes are confined to sports activities.

Materials required :

Variety of sports related genes such as :
Gene responsible for muscle builds up and quick movement ath is ACTN3.
The protein alpha actin 3 of ACTN3. Mutated RS 77x gene from ACTN3.
APOE gene and its protein produced. Myostation growth factor
Insulin (IGF-1) Enzyme phopphoenol pyruvate carboxyl kinase (9 pepck-c) Erythropoietin.

Methodology :

The first concept means human body harbours already special genes for special activities in sports such as elite athletic, sprinters, gymnasts etc. several evidence shows that there are large number of special sports genes in body by birth but as time passes they express proteins that causes the body to exhibit it in board ways, once such example is Mac Arthur's coauthor professor Kathryn North was studying people with neuromuscular disease in the hope of finding a cause if not a cure. Later he focused on a gene caved ACTN3, which is already found in small organisms to human beings, ACTN3 controls the production of protein in muscles. This gene producers alpha actinin – 3 found in twich muscles, the type that are predominantly used to make powerful movements such as sprinting and jumping etc.

Everyone has to copies of ACTN3 but some people have a variation which is known as RS77x. This variant stops muscle cells from reading the entire code of ACTN3, therefore if a person has two copies of R577x, it means they cannot produce the protein alpha actin – 3 at all yet 18% of people cannot make this protein another gene called ACTN2 helps compensate for the deficiency.

When more than 100 elite athlete's DNA is sequenced who were involved in swimming, skiing and compared here champion's DNA with he normal person the maximum genes were similar but

sports related genes were opposite to each other endurance athletes generally had a deficient version of both the above genes.

It is shown that lacking functioning copies of ACTN3 actually benefits slow, efficient muscle performance but power and sprint athletes have two fully functioning copies of ACTN3, thus, ACTN3 becomes the speed gene. Genetics has reached upper hand in sport to such an extent that the forthcoming champion can be well screened before he/she becomes champion via gene sequencing. The rare individuals need to have a near perfect set of genes to have a chance of winning an Olympic medal. The ACTN3 gene appears to have a particularly strong effect on sprinters. Sprinters need to have a chance of competing at an Olympic level. So now a day gene napping will help in assessing the speed gene, if speed gene is not present in a sportive body, could never become an Olympic sprinter no matter how hard the person may be trained.

In the same way soccer gene is found in soccer player by birth and as the time passes it switches on and expresses its potency. The gene identification via sequencing of ACTN3 is done by collecting the saliva sample with a mouth swab. Another gene APOE is well expressed in boxers than anyone which is also connected to nervous system activities.

The day is not so far champions are selected before Olympics being as they have the winner genes in the body, just need to activate by touch of training.

Myostatin :

Myostatin is the growth factor that acts as a brake on muscle development. High ratio of Myostatin secreted will make less muscle development hence when a such gene is mutated (Manipulated) then there won't be limit development. Thus it is helpful in body builders.

Insulin :

Insulin like growth factor 1 (IGF-1) is the hormone most responsible for regulating cell growth and development. An athlete with abundant IGF-1 and related hormones and regulates will be tall; useful for basketball players.

Over expression of a gene for the enzyme phosphoenol pyruvate carboxyl kinases (pepck-C) is modified as result less lactic acid and fat burning will be more as a result an sportsman can run six hours treadmill nonstop at high speed.

Erythropoietin :

Erythropoietin is an hormone regulates the number of red blood cells. When such gene is altered the EPO receptor enables blood cell to carry higher levels of oxygen, similar to blood doping. It helps in increase of cardiovascular stamina.

A variant of the bradykinin beta 2 receptor gene (BUKBR2) has recently been linked to the ability to run long distance in Olympic standard athletes.

"Quantitative genetics" is one such branch where genes are evaluated at higher level for their potency. Sports activities are innate and acquired, innate is one brought in legacy by forefathers and acquired one is by training. The innate behavior towards sports. When begged by training may produce innumerable Olympic athletes in future so the screening of such genes is mandatory. Genes account typically for half of the variation in performance between individual. Heredity determines at least half the variation in the response to training. It is said always good leaning is half done so, the genes with specific ability towards sports are seen by birth and when trained a bit may makes a miracle in sports. Thus heredity (genes) may be even more important in athletes, because an athletes ability to sustain high training loads without over training is probably inherited.

Easy to listen, hard to digest :

Failure to win is not necessarily failure to train right, you can always blame genes, amongst other things.

Genotyping of prospective athletes will become an option when performance or injury genes have identified, but many regard the practice as unethical.

If you want your kids to be great athletes marry a great athlete.

There is always evidence that genes make a contribution to performance. The exact contribution is well known using technology that is coming on track through the human genome project.

Unethical refers to the abuse of drugs or other forms of cheating. But cheating with the use of DNA markers to identify an elite athlete is not where concern as its just searching own ability in own body.

When DNA marker are used in medicine, life saving programmes to identify diseases, causes, and treatment then why not DNA markets to find a best champion amongst. However a coaching career well not last long if the coach select athletes only on the bases of DNA, but a coaching career might flouriest if the coach gets ahead of rivals by adding DNA information to other selection criteria and good tracing.

Role of diagnostics in sports :

Some people are born to play football, genetically screening for potential football stars are in practice now. Sports performance gene test helps in selection that normally specialties in paternity testing. Genetic technologies.

With the help of recombinant technology and molecular biology the term gene therapy is denoted, which seems to be a boon for sportsman in increasing longitivity of organs even after continuous it is employed as follows.

A sportsman developing rarely arthritis and commonly muscular dystrophy can be well treated by gene therapy at anytime as the non functioning gene is replaced by functional active gene.

Steaming endurance, power, speed can be increased and maintained by cloning a gene or inducing a gene to young budding sportsman.

Any disease putting barrier for the most favorite wanted sportsman can be treated via gene therapy.

Efficiency of protein secretion of hit the target in indoor is outdoors gamer are made by gene therapy.

Role of sports on vital genes :

Apart from heredity matters even if the sports are brought in normal life of a layman it activates almost all genes in body and show the benefits.

It increase anabolism and catabolism.

It elevates hormone level from pituatory glands.

It increase respiratory, oxygen intake

It increases basal metabolic rate.

Genes concerned to gynecological matters are well kept in work when a lady practices sports regularly.

Sports actives nervous the genes to produce adequate acetyl choline in central nervous system as a result nerve impulse reaches soon and mental consciousness well be at stable state.

Sports always helps in calibrating genes as the they are made to work when body is brought in movement as a result proteins and their target receptors works in a regular manner.

Results :

Finally, genes, genetics, heredity, gene therapy are sum of the buzz words, but perhaps the most exciting era is genetic era in sports which is creating upper hands in the field of sports technology.

The day is not so far when a layman to induce special sports genes in body and become a champion.

Constant work on present paper shows that genes play important role in sports and in turn sports regulate special genes to maximum peak.

More than training to make sportive body, the body being bestowed with sports genes responds quick and accurately.

"Lets remember : genes for sports and sports for genes"

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Comparison of gender health status and fitness

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Abstract :

Regular physical activity, fitness, and exercise are critically important for the health and well being of people of all ages. Research has demonstrated that virtually all individuals can benefit from regular physical activity, whether they participate in vigorous exercise or some type of moderate health enhancing physical activity. Even among very old adults, mobility and functioning can be improved through physical activity. The 45 year old or even 75 year old, who become active even after years of sedentary living, experience the same lower risk of death and the same added years of life as the man or women who remains habitually active all along.

Introduction :

More than 60% of the world's population is not physically active at levels that promote health. In concert with other behavioral risk factors for cardiovascular disease (CVD), sedentary lifestyles exert a heavy medial and economic toll on individuals and societies. Physical activity lowers all cause mortality, reduces several risk factor for cardiovascular disease, and is a category two intervention that can halve cardiovascular disease risk. The benefits extend across a wide spectrum of structured as well as lifestyle physical activity levels. Models and programs aimed of translating physical activity's promise in cardiovascular prevention have been assessed, but results have been generally disappointing. A pragmatic strategy based on the "stages of change" or trans theoretical model can be effective. It incorporates self efficacy and individual initiatives, both crucial ingredients necessary to surmount the inevitable hurdles on the path towards physically active lifestyles.

In this context researcher was of particular interest in examining the health status of individuals who are intrinsically motivated to indulge themselves in some or the other form of physical activity and compare them on the basis of gender.

Methodology :

All together 248 fitness enthusiasts who were involved in self motivated regular fitness workouts in parks, stadiums, playground and other public areas of Kalaburagi city, Karnataka served as subjects for this study. They were selected on the basis of random proportional sampling to give equal representation to male (N=124) and female (N=124) participants and their age ranged between 45 to 60 years. To measure their health status, body mass index (BMI) involving height in meters and weight in kgs was made use. For this purpose, stadiometer to measure height and standardized electronic weighing scale for measuring weight were used. Further a self structured questionnaire was administered in order to obtain their demographic information, personal details, frequency and duration of physical activities etcetera.

In order to collect necessary information the researcher along with a trained helper was personally present on time at the locations mentioned above. Prior to his visit he had made all essential arrangements related data collection. The researcher requested subjects to assemble in a particular place and at the out set made the intentions of the study clear. He requested their cooperation for data collection and sought honest opinion on questionnaire.

Analysis of Data :

The raw data obtained on height and weight was statistically treated with the formula $BMI = \text{weight in kgs} / (\text{height in mtrs})^2$ to obtain BMI of each subject. In order to examine the hypothesis of the study descriptive statistics including mean, standard, deviation and 't' test for independent variables were utilized. Graphical representation of data was also made where ever required. Results of the study are been given in the following tables. Table 1 provides information on BMI of both male and female participants.

Table -1
Mean, SD and Normative response of male group (N=124) on BMI

Mean	Standard Deviation	Normative Response
28.52	4.74	Over weight

From table 1 it is evident that the mean score of male group in terms of BMI is 25.82 4.74. This score when applied to the norms constructed by National Institute of Health reveals that the male group fails in the category of over weight. Similarly, information on BMI of female participants is presented in table 2.

Table -2 Mean, SD and Normative response of female group (N=124) on BMI

Mean	Standard Deviation	Normative Response
24.45	3.51	Over weight

From table 2 it is evident that the mean score of male group in terms of BMI is 24.45 3.51. This score when applied to the norms constructed by National Institute of Health reveals that the female group fails in the category of over weight. Similarly, information on BMI of female participants is presented in table 3.

Table -3
Mean, SD and Normative response of female group (N=124) on BMI

Sl.No.	Gender groups	Mean	SD	't' score
1.	Male group	25.82	4.74	2.697*
2.	Female group	24.45	3.51	

*Table value required for significance at .05 levels is 1.645

Above table describes the fact that there is significant difference between two groups in terms of body mass index. The 't' ratio was tested for significance at .05 level of confidence. The tabulated 't' value required for significance was 1.645. As the obtained 't' value is higher than the tabulated value it can be concluded that the mean scores of two groups differ significantly.

Findings :

Results of the present study indicates that the male group needs due attention to improve their health status and neglect of which will lead to serious and life threatening health problems. In spite of the fact that the group is actively involved in some sort of physical activity, their health seems to be deteriorating. Reasons for this may be attributed to low intensity of workout, low volume of workout, irregularity to workout, lifestyle so on and so forth. What ever may be the reason, it is high time for these urban male fitness enthusiasts to sit back and think of their exercise regimen seriously. A professional's help can also be sought in this direction which can be handy.

Conclusion :

On the basis of the findings of the present study, it can be concluded that the female fitness enthusiasts in urban setting are been benefited optimally. On the other hand, their male counterpart are on the verge or facing serious health problems associated with cardio vascular, respiratory and associated problems including hypertension, diabetes etc.

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Motor Ability among Football and Basketball players

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Dr.M.S.Pasodi, Director of Physical Education, Gulbarga University, Kalaburagi**

Abstract :

Speed and endurance are important components that requires in every game for improvement of performance. Endurance is one of the components for fitness, speed is also another components such muscle reaction with quick alteration of contraction and relaxation of muscles. Speed performance cannot be difference between speed and endurance of football and basketball players of university level. The total 30 samples university level football and basketball players were selected divided in two equal groups of 15 each.

Introduction :

Speed and endurance are important components for physical fitness in every game for improvement of performances. The game of football is similar and it involves the speed and endurance to attempt the score. Many of these involving kicking a ball with the foot to score a goal. Where it requires the speed and endurance in football game. Basketball similarly basketball in an quick reaction time to secure basketing within shortest possible time by maintaining speed and endurance.

Objectives :

- To asses the speed ability of the university level football players.
- To asses the speed ability of the university level basketball players.
- To calculate the endurance for the university level football players.
- To calculate the endurance for the university level basketball players.
- To compare the speed and endurance among the football and basketball players separately.

Delimitation :

The study was conducted on the student of Gulbarga University the age range of 21 – 25 and the male players only selected for this study.

Limitation :

The study could not control the underlying variables such as injuries, sickness or tiredness, physical and social environment were considered as limitation.

Hypothesis :

- There is significant difference in speed between football and basketball players.
- There is significant difference in endurance between football and basketball players.

Significance of the study :

The study may help for the trainers in relation to motor components.

Methodology :

The purpose of the study was to see the comparison of speed and endurance among football and basketball players. Those who have participated at university level. The criterion measures speed 50 – and endurance 12min run and walk.

Statistical analysis :

The obtain the mean performance of the samples is in descriptive method to determine the significance difference between the group mean of the criterion measures t-test was employed.

Results :

The data collected from the two groups football and basketball group of 30 players the data were analyzed by using t-test to game the mean difference of speed and endurance of two groups that is football and basketball. The level of significance to the t-test ratio was at 0.05 level which is appropriate.

Comparison of speed and endurance between football and basketball players

Variables	Speed		Endurance	
	Football	Basketball	Football	Basketball
Mean	6.61	8.41	2088.8	1982.32
SD	1.24	1.08	397.3	412.53
t-value	4.89		3.61	

** Significant at 0.05 level

Findings :

The findings of the data was observed that in speed basketball players are better than the football players in case of speed. It is observed that the football players are having more endurance comparison to basketball players.

Conclusion :

Within the limitation of the study concluded that the mean performance in speed of the university level basketball players are better than the football players. The mean performance in endurance of the university level football players was found significant than the basketball players.

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Comparative Study Of Vital Capacity Between Sports And Non-Sports Women

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Dr.M.S.Pasodi,Research Scholar, Dept.of Physical Education, Gulbarga University, Kalaburagi**

Abstract :

The purpose of the study was to find out the comparison of vital capacity to height and weight for sports and non sports women. In order to see the vital capacity difference between sports and non sports women, 40 sports women selected from V.G. Women's College, Gulbarga and Govt. Women's First Grade College, Gulbarga were selected and their vital capacity was measured using vitalometre (wetspiro metre), in addition their weight and height.

Introduction :

The greatest volume of air that can be inhaled from the resting respiratory level is called the in respiratory capacity which amounts to 2 to 3 liters. From the resting respiratory level a considerable volume of air, which is about 1.5 litres, can be exhaled and this is known as reserve volume. The sum of the inspiratory capacity and the expiratory reserve volume is called the vital capacity which can be measured by requiring the subject to make the deepest possible inspiration, followed by a maximal expiration into a measuring spirometer. The vital capacity varies considerably with a person's body build and, to lesser degree with physical condition of the subjects it has a range of about 3.5 to 6 liters.

There has been no study conducted to know the difference in vital capacity between sports and non sports women and therefore the research was motivated to find out difference in vital capacity between the sports and non sports women.

Methodology :

In order to carryout the study 80 female students of 18 to 20 age group from V.G. Women's College and Govt Women's First Grade College, Gulbarga were selected with regard to their age. The completed year was taken into consideration. All the subjects were free from any physical abnormalities and had no medical history contradicting their participation as subjects in this investigation non-athletes were never had training in any specialized physical activity. They are all participated in this investigation voluntarily and cheerfully without any compulsion. Subjects belonging to sports category had an previous occasion participated in state and national level sports, apart from taking part in the sports and games organized by University. Selected subjects were participated in athletics, basketball and volleyball.

Analysis of Data :

Table – 1 :Table showing the mean and S.D. vital capacity, height and weight of sports and non sports women

	Sports Women	Non-Sports Women
Mean Height \pm S.D.	161.23 \pm 4.7	156.56 \pm 3.6
Mean Weight \pm S.D.	5078 \pm 5.1	45.73 \pm 5.3
Vital Capacity \pm S.D.	2.62 \pm 0.17	2.15 \pm 0.27

Conclusion :

The mean vital capacity of sports women is more than that of non-sports women.

There is significant positive relationship between vital capacity and height and vital capacity and weight of sports women.

There is significant difference between the correlation coefficients of vital capacity with height and weight of sports and non sports women.

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Cardiovascular efficiency and strength among rural and urban high school girls

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Majeed,Research Scholar, Dept.of Physical Education, Gulbarga University, Kalaburagi

Abstract :

The purpose of the study is to compare the cardiovascular efficiency and strength – leg, back and grip of urban and rural high school girls. Cardio vascular efficiency was estimated with the help of Harvard step test, leg and back strength were measured with the help of dynamometer and grip strength was measured by using grip dynamometer.

Introduction :

Both strength and cardiovascular efficiency are influenced by age, sex, habits, and style of life. People mostly live in either urban area or rural area. The geographical and environmental factors and the nature of life may influence the development and maintenance of strength and cardiovascular efficiency especially among the high school girls. Therefore, the author was motivated to under take a study on this aspect.

Methodology :

The study on hand purpose to make a comparison of cardio vascular efficiency and selected strength aspects between rural and urban high school girls.

Estimation of cardiovascular efficiency :

Cardio vascular efficiency of the subjects was measured as explained in Harvard step test.

Measurement of grip strength :

Grip strength was measured with the help of grip dynamometer.

Samples :

75 rural and 75 urban high school girls were selected as a subject.

Analysis of data :

Table -1:Mean and t-value of cardiovascular efficiency

Statistic	Rural	Urban
Mean	48.71	44.25
t-value	3.188	

Significant at 0.01 level

Table – 2: Statistics of strength of urban and rural girls

Statistic	Right hand grip strength		Left hand grip strength		Leg strength		Back strength	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Mean	22.45	22.64	19.83	20.21	152.75	151.07	74.43	73.55
t-value	0.176		0.336		0.284		0.24	

Significant at 0.01 level

Conclusion :

The mean cardiovascular efficiency index of rural high school girls is better than that of urban high school girls. This fact indicates that rural high school girls have better cardiovascular efficiency, which fact reflects the better status of health related physical fitness. In the area of grip strength the urban high school girls were found to be marginally superior to the rural high school girls. However, the statistics is not significant to say that the urban sampling is superior.

In the leg strength and back strength aspects also though the figures are not statistically significant the rural high school girls are found to be having an edge over the urban high school girls.

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Effect of Plyometric Exercises for development of Shoulder Strength among Wrestlers of Gulbarga University

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Abstract:

Plyometric exercises are a vital component for Wrestlers for obtaining the maximal strength, speed and force during the wrestling event and should be included in any conditioning program of Wrestling; The purpose of the present study to find out the effect of plyometric exercises for the development of Shoulder strength among Wrestlers. The sample for the present study consists of 20 Male Wrestlers of Gulbarga University out of which 10 are experimental group and 10 are controlled group. Plyometric exercises such as hopping, bounding, depth jumps, tuck jumps, Push ups etc were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training for six weeks. Pre Test and Post Test were conducted in Pull ups to measure the shoulder strength among experimental group and controlled group. This study shows that due to the plyometric training there is a improvement of experimental group in the Shoulder strength and controlled group is decreased in performance of shoulder strength. It is concluded that due to plyometric exercises there will be improvement in shoulder strength among Wrestlers.

Key Words:plyometric exercises,maximal strength, Wrestlers etc.

Introduction:

Plyometric exercises are a vital component for Wrestlers for obtaining the maximal strength, speed and force during the Wrestling event and should be included in any conditioning program of Wrestlers. Successful wrestlers are athletic, technically sound and tactical savvy in the ring. Spending long hours in the gym makes you more technical and tactical. With an effective workout routine and the right training, your coordination, quickness and explosiveness should improve through Plyometric training. Plyometric train your nervous system to trigger quick, Powerful muscle contractions, workouts include high intensity exercises that emphasize short bursts of energy. Wrestling a sport that requires explosive and powerful movements for an athlete to succeed. Plyometrics mimics the physical demands of a fight and will train your body to move more quickly and explosively. When completing plyometric exercises, they must be done in short bursts at the highest intensity possible, then take a brief rest before moving to the next set or exercise. Fitness is a very important in the success of a Wrestlers.

Method:

The purpose of the present study to find out the effect of plyometric exercises for the development of Shoulder strength among Wrestlers. The sample for the present study consists of 20 Male Wrestlers of Gulbarga University out of which 10 are experimental group and 10 are controlled group. Plyometric exercises such as Push ups, Medicine Ball Throws, Hopping, Bounding, Tuck Jumps, Box Jumps, dumbbell throws etc were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training for six weeks. Pre Test and Post Test were conducted in Pull ups to measure the shoulder strength among experimental group and controlled group. The Wrestlers weight categories is from 57 Kgs to 74 kgs.

Result:

This results of the study shows that due to the plyometric training there is a improvement of experimental group in the Shoulder strength and controlled group is decreased in performance of shoulder strength due to the general training.

Table I: Mean values of Pull Ups test between experimental and control groups of Wrestlers

Variables	Group	Pre Test Mean	Post Test Mean	t	P - Value
Pull ups	Experimental	10.00	13.50	6.19	0.000
	Control	10.10	10.00		

The Experimental Group of Pull ups in Pre Test is 10.00 and Controlled Group mean is 10.10 in Pre Test there is a difference of 0.10 in Pre Test. The Experimental Group Mean in Pull Ups Test is 13.50 in Post Test and Controlled Group mean is 10.00, the Experimental Group mean in Post Test in Pull ups Test is improved from Pre Test 10.00 to Post Test 13.50 and Control Group Mean is post test is 10.00 there is a decrease in the performance from 10.10 to 10.00. The Experimental Group has improved due to Plyometric exercises in Pull ups Test and Controlled Group is decreased due to general training.

Conclusion:

Wrestlers is all about explosive power. Explosive power is a combination of speed, muscular endurance and muscular strength, all of which can be developed through plyometric exercises. In a competitive sport such as Wrestlers overall body strength and ability to attack quickly are distinct advantage. Competition are according to the weight categories. It is concluded that due to plyometric exercises there will be improvement in shoulder strength among Wrestlers

Recommendations:

Similar Studies can be conducted on Women Wrestlers and other sports and games.

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Wikipaedia,Wrestlers