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Effects Of Extracurricular Exercises On The Shape And Physical Strength Of 9-Year-Old Female Pupils With Class-I Obesity At Kim Dong Primary School, In Hanoi City

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Abstract
Based on related literature and practical case, the paper has proposed a system of weight-loss exercises for nine-year-old female pupils with class-I-obesity. The recommendation was developed on the formula for selecting exercises according to weight loss in the whole training course, and necessary energy consumption in one training session. After a 12-week experimental period in which the pupils was scheduled to exercise at home, at school and to follow and a reasonable diet, their shape and physical strength have been improved. **Key words:** 9-year-old female pupils; class-I obesity; exercises for weight loss; shape, physical strength.

Introduction
According to the World Health Organization (WHO), over weightness or obesity is defined as abnormal or excessive fat accumulation that may affect health [9]. Physical body development varies with age, so it is impossible to evaluate obesity of all ages, especially school-aged children employing a common benchmark [8], [7]. The two most commonly used indexes to assess a child's overweightness are weight for height (W/ H) index and Body Mass Index (BMI) by age and gender [10]. To make the work easier for medical experts, the Advisory Board added BMI-based classifications in Asian countries so that they can select public health interventions with appropriate benchmarks[6]
A survey carried out in two major cities in 2000 indicated that the percentage of overweight or obesity among primary school pupils in Hanoi was 10% [1] and in Ho Chi Minh City was 12% [2]. Recent studies have shown quite a high rate of overweight among children in typical cities by regions: The North, Highlands, the Central and the South. In 2011, a study, by Trinh ThiThanhThuy, on 6 to 11-year-old children in Dong Da District, Hanoi showed that the percentage of overweight was 12.9%; among boys was 17.9% and among girls was 7.4% [3]. A Deckelbaum's study in America revealed that overweight children often have low self-esteem, feel unconfident to communicate with others, anxious, depressed, and abandoned more often than ordinary children [4]. In order to lose weight, in addition to following a special diet, it is necessary to do physical activities for at least 30 minutes a day, such as jogging, swimming, aerobics, cycling, etc. Through the analysis of 22 interventional studies from 1990-2005 in the United States, Summer bell commented that the majority of the intervention was made at school (19 case studies) and a few were made in the community (2 case studies) or in low-income families (1 case study). These studies focused on changing the diet and increasing physical activities. [5]
Through the survey, the class-I obesity of the 9-year-old female pupils at Kim Dong Primary School in Hanoi was at higher risk than the general statistics of the demographic survey. Through the evaluation criteria, we found that the pupils' shape is disproportionate and their BMI is higher than that of the peers. The causes of the aforesaid condition are the unbalanced lifestyle, diets and exercises. In order to have a well-proportioned body, the school should cooperate with the families to increase the pupils' time for physical activities through a special extracurricular physical program coordinating with a change in lifestyle to reduce the excess weight so that their body would resume the normal shape.

Methods

The following methods have been employed to conduct the research: the method of synthesizing and analyzing materials to develop fundamental literature for the research; the Medical Screening Test to assess some shape-related indexes of the 9-year-old females with class-I obesity before and after the experiment; the interview method to select some physical exercises to lose weight, to determine the form of exercises and the experimental plan; t methods of pedagogical experiments; and mathematical statistics.

Results

1 Theoretical and practical background for exercise selection

* Principles of selecting exercises

- Selected exercises are aimed at losing weight and improving trainee's physical strength
- The required amount of energy consumption in each exercise should be carefully calculated to lose weight for trainees of different weights.
- Form of exercises should be in accordance with the practical conditions of the school.
- The volume of movement in exercises must be suitable with the research pupils.

*** Theoretical background**

The weight-loss exercises are aimed at improving metabolism, activating oxidation processes, and promoting the lipolysis. Selected exercises must have moderate paces. The body development exercises must mobilize large and medium muscle groups into action.

Losing weight means generating energy from resolving aerobic fatty acids. The ratio between the glucose and the oxidized fat depends on the capacity of aerobic exercises. Therefore, weight-loss exercises for obese children should be light and last longer than 30 minutes.

*** Practical background**

To select exercises meeting the requirements of energy consumption and reducing excess kilograms, based on BMI of ordinary children to calculate the equivalent weight, we figure out the number of kilograms they have to lose. The conversion formulas will be: 1pound = 3,500 calories; 1kg = 2.2 pound. So1kg = 7,700 calories. Accordingly, the amount of kcal that pupils need to burn is as follows:

Table 1 Determine the number of kilograms to be reduced for 9-year-old female students suffering level-1 obesity at Kim Dong Primary School in Hanoi

Index	Current situation			Adjustment			
	Height (m)	Weight (kg)	BMI	NORMAL BMI	Normal weight (kg)	The minimum kilograms to lose	The amount of kcal to be cut down
9 year old female	1.37	45.87	24.4	18.5 – 22.9	34.7 - 42.9	3	23100

So in the 12 weeks of experimenting, the 9-year-old females need to reduce 3 kg equivalent to 23100 kcal / 12 weeks, 1925kcal / 7 days or 275 kcal / day

2. Selection of some weight-loss exercises for 9-year-old female pupils with class-I obesity at Kim Dong Primary School in Hanoi

Based on the selection principle, theoretical background with an aim to reduce the excess weight, and the analysis of different references, especially weight loss exercises recommended for children in China and America [11], [12], [13], the formula identifying the proportion between weight-energy consumption and forms of exercise is developed as follows [14], [15]:(Activity) x (Calories burned per pound per minute) x (time) x (exact weight) = (equals total calories burned per activity). With reference to the table, 17 exercises have been suggested. These exercises, with the burning amount of calories per 1 minute suitable for the research pupils, have been considered and discussed by 12 experts in the field of Biomedicine and Physical Education. There are 8 exercises selected in the end as follows:

Cycling, 19-22 km/h, moderate effort (284Kcal); Gymnastics (push-up, sit-ups, tug-of-war) (284 Kcal); Walking up the stairs (284 Kcal); Football (319 Kcal); Slow-paced rope jumping (284 Kcal); Running in 12 minutes/1600m (284 Kcal); Aerobic step (301 Kcal); Badminton (248 Kcal)

These exercises have the same amount of burning Kcal in the same training period; hence, they can be practised interchangeably.

3. Develop an experimental plan

Develop a reasonable experimental process for the research pupil based on:The period of extra-curricular physical activities scheduled in the afternoons after school.The developing process from the selected exercises through interviews Based on the principles of physical training, engaging various types of exercises in a week to avoid the boredom but still ensuring the time and energy to be consumed.Form of collective exercisesPersevere to practice all of the required volume in each session and throughout the process Accordingly, the experimental process of 12 weeks was developed. In each week, 5 sessions would be supervised by the school, and 2 would will be supervised by the parents. All related parents were committed to making their children cycle with moderate effort at weekends. The training process was as follows:

Week 1: Running (12 minutes / 1600) Football; Badminton
Week 2: Aerobic step; Slow-paced rope jumping
Week 3: Gymnastics; Walking up the stairs
Week 4: Running (12 minutes / 1600s); Aerobic step
Week 5: Football; Gymnastics
Week 6: Badminton; walking up the stairs
Week 7: Running (12 minutes / 1600m); Slow-paced rope jumping; Badminton
Week 8: Aerobic step; Football
Week 9: Walking up the stairs; Gymnastics
Week 10: Running (12 minutes / 1600s); Gymnastics
Week 11: Slow-paced rope jumping; Badminton; Football
Week 12: Walking up the stairs; Aerobic step

4.Apply and evaluate the effectiveness of some weight-loss exercises for 9-year-old female pupils with class-I obesity at Kim Dong Primary School in Hanoi

Organizing the experiments

Pedagogical experiments were conducted in the form of self-reflection. Subjects are 21 nine-year-old female pupils with class-I obesity. After every 6 weeks of continuous practice, an on-going assessment was conducted to determine the effectiveness of the exercises.

Conducting experiments:

With permission from the school Board and pupils' parents, the pedagogical experiments were conducted in 12 weeks (from October 2015 to late December 2015) with 7 days a week: 5 sessions of which were done at school in the afternoon and 2 were done at home in the form of cycling. Each session lasted for 45 minutes.

- When taking exercises regularly, the pupils' endurance of the volume of exercises through the prescribed vascular approach (for primary school students) is monitored at the level:

(220 - age) x 60% - 75% = limited pulse rates

- A training session in the pedagogical experiment must include: Warm-up, accounts for 5%; important activities account for 85%; and wrap-up accounts for 10% of the total time.
- Teachers actively monitor the pupils' performance in each lesson plan.
- School and the family scheduled to change the pupils' lifestyles by adding more home-based activities for the pupils, reduce junk food consumption, cut energy-rich foods, and increase fruit and fiber consumption. Appropriate and scientific diets based on the nutritional value tables in Vietnamese foods have been distributed to parents.

Experimental results

Table 2: Shape-related findings of 9-year-old female pupils with class-I obesity at Kim Dong Primary School in Hanoi after the experimental period (n = 22)

No.	Shape-related index	Before experiments	6 weeks after experiment	12 weeks after experiment	Statistical difference after 6 weeks		Statistical difference after 12 weeks		Weight after 6 weeks	Weight after 12 weeks
					t	p	t	p		
1	Height (m)	1.37 ± 0.012	1,376 ± 0.05	1,382 ± 0.14	0.41	>0.05	1.13	>0.05	0.43	0.87
2	Weight (kg)	45.87 ± 3.7	44.12 ± 2.1	42.8 ± 2.3	2.37	<0.05	3.41	<0.05	3.9	6.9
3	BMI	24.4 ± 2.1	23.3 ± 1.1	22.4 ± 1,4	2.45	<0.05	3.37	<0.05	4.6	8.5
4	Chest size (cm)	79.9 ± 7.4	79.0 ± 4.4	78.1 ± 4.2	1.49	>0.05	2.22	>0.05	1.1	2.3
5	Annulus abdominalis (cm)	77.02 ± 8.5	75.12 ± 4.5	73.65 ± 4.7	2.62	<0.05	3.04	<0.05	2.5	4.5
6	Hip circumference (cm)	78.32 ± 5.8	77.61 ± 3.7	76.79 ± 3.5	1.23	>0.05	2.23	>0.05	0.9	1.9
7	Thigh circumference (cm)	47.15 ± 3.2	46.65 ± 1.9	46.11 ± 2.6	1.11	>0.05	2.31	>0.05	1.1	2.2

Shape-related findings of the 9-year-old female pupils with class-I obesity showed that if the pre-experiment BMI was 24.4 nearly hitting the baseline of the class II obesity (24.9), after 12-week-experiment, it was reduced to 22.4 at the normal baseline, the growth rate tended to reduce to 4.6% BMI after 6 weeks and 8.5% after 12 weeks which are a relatively high negative growth rate. This demonstrates that exercises selected in the research were obviously effective on weight loss for the pupils.

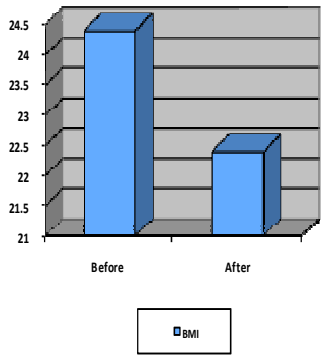

Figure 1: BMI of 9-year-old female pupils with class-I obesity before and after the experiment

After 12 weeks, indexes of weight, annulus abdominalis and BMI clearly showed the statistical difference with P <0.05. The rest of the indexes had a positive decrease and circumferences also decreased. Although the necessary statistical reliability was not met, the exercises had made the body thinner, improving the body shape for the trainees.

Table 3. Physical results of 9-year-old female pupils with class-I obesity at Kim Dong Primary School in Hanoi after the experimental period (n = 22)

Index / Subjects		Long jumping in place (cm)	Running 30m with a high starting position (second)	Shuttle run 4 x 10m Shuttle (second)	Health-based run in 5 minutes (m)
Before the experiment	$\overline{X}$	120.17 ± 2.52	7.95 ± 0.12	17.13 ± 1.25	576.42 ± 51. 2
	CV%	14.16	15.12	16.32	17.47
Sports training standards (satisfactory level)		≥ 127	≤ 7,70	≤ 14,20	≥ 690
Evaluate $\overline{X}$ according to Sports training standards		Disqualified	Disqualified	Disqualified	Disqualified
The number of qualified pupils		0	0	0	0
Percentage %		0	0	0	0
6 weeks after the experiment	$\overline{X}$	125.42 ± 3.66	7.71 ± 0.14	16.34 ± 1.18	642.02 ± 34. 3
	CV%	15.3	16.5	15.2	17.47
Evaluate $\overline{X}$ according to Sports training standards		Disqualified	Disqualified	Disqualified	Disqualified
The number of qualified pupils		4	5	0	0
Percentage %		40	50	0	0
12 weeks after the experiment	$\overline{X}$	128.02 ± 3.32	7.64 ± 0.14	15.76 ± 1.38	695.15 ± 36. 6
	CV%	15.3	14.9	16.1	18.8
Evaluate $\overline{X}$ according to Sports training standards		Qualified	Qualified	Disqualified	Qualified
The number of qualified pupils		17	17	10	15
Percentage %		77.2	77.2	45.5	68.2
Statistical difference after 6 weeks	t	2.47	2.14	2.82	3.41
	p	<0.05	<0.05	<0.05	<0.05
Statistical difference after 12 weeks	t	2.55	2.46	3.59	4.23
	p	<0.05	<0.05	<0.05	<0.05
Weight after 6 weeks %		4.3	3.1	4.7	6.0
Weight after 12 weeks %		6.3	4.0	8.3	9.7

Table 3demonstrates that the pupils' physical strength, after the experiment, experienced a remarkably positive change reflected in the test results. In fact, after 6 weeks the test results were better than those before the experiment. The difference in the necessary statistical reliability reached the probability threshold of P <0.05. Although after the first 6 weeks of the experiment, the pupils' average performance did not meet the requirements of sports training, some pupils met the standards of physical strength and speed. After 12 weeks, test results of the student's physical strength showed a significant difference compared to those of the pre-experiment reflected in the dissimilarity of necessary statistical reliability of P <5% in all tests. In addition, the pupils' average achievements in tests assessing speed, strength and endurance satisfied sports training standards with the number of qualified pupils accounting for 68.2% to 77.2% the total number of pupils.

To learn about how exercises affect physical factors of 9-year-old obese females, we studied the growth rate of the pupils' achievements. The results showed that the fastest growth achievement was the endurance, then the ability to coordinate movements, the strength and the speed.

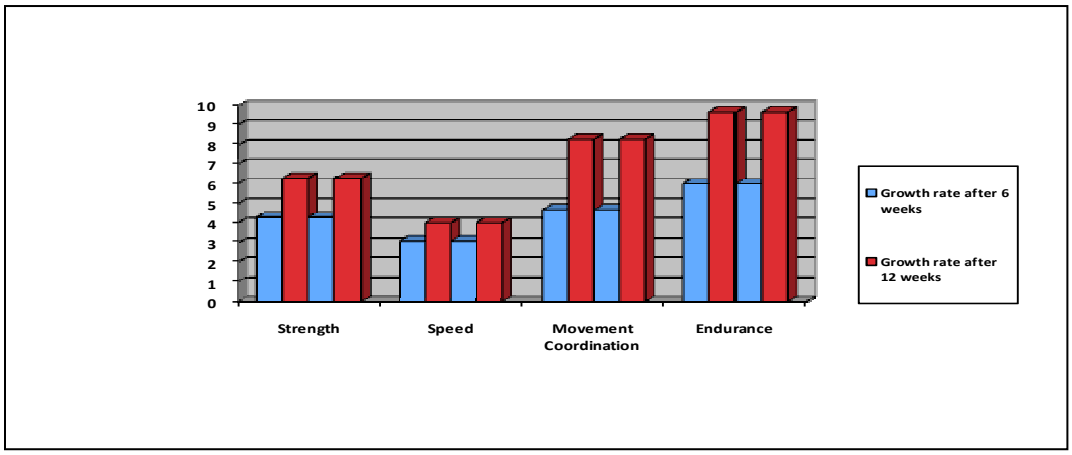

Figure 2: Physical growth rate of 9-year-old female pupils with class-I obesity after 6 weeks and 12 weeks of the experiment

Thus, even though some pupils did not meet sports training standards, the selected exercises helped improve the pupils' physical strength to the greatest extent.

Conclusion: Based on theoretical background and practical conditions, the needed amount of energy to reduce for 9-year-old female pupils with class-I obesity at Kim Dong Primary School in Hanoi after 12 weeks has been determined to be equivalent to 1925 kcal. On average they're required to reduce 275 kcal / dayThe research selected 8 types of weight loss exercises which can be interchangeably practised during the training process.After the 12-week experiment with 5 sessions per week done at school and 2 sessions per week at home, the selected exercises improved the shape and strengthen the physical strength for the research pupils.

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Effect Of Endurance Training On Body Fat Of Tribal Students

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Introduction:
Tribal people live in the forests and hill areas where there are no facilities. They are always with the nature and they struggle for daily needs like food, water for which they need to go far. They always protect themselves from the wild animals and natural calamities. Adivasi is an umbrella term for a heterogeneous set of ethnic and tribal groups claimed to be the aboriginal population of India. They comprise a substantial indigenous minority of the population of India.

The term Training is widely used in competitive sports. Training plays a vital role in today's competition field where the records are being broken in every successive meet. Training is the acquisition of knowledge, skills and competencies as a result of the teaching of practical skills and knowledge that relate to specific useful competencies.

Body fat:
Human or other living being is the total mass of fat divided by total body mass; body fat includes essential body fat and storage body fat. Essential body fat is necessary to maintain life and reproductive functions. The percentage of essential body fat for women is greater than that for men, due to the demands of childbearing and other hormonal functions. The percentage of essential fat is 2–5% in men, and 10–13% in women (referenced through NASM).Storage body fat consists of fat accumulation in adipose tissue, part of which protects internal organs in the chest and abdomen. The minimum recommended total body fat percentage exceeds the essential fat percentage value reported above. A number of methods are available for determining body fat percentage.

The body fat percentage is a measure of fitness level, since it is the only body measurement which directly calculates a person's relative body composition without regard to height or weight. The widely used body mass index (BMI) provides a measure that allows the comparison of the adiposity of individuals of different heights and weights. While BMI largely increases as adiposity increases, due to differences in body composition, other indicators of body fat give more accurate results; for example, individuals with greater muscle mass or larger bones will have higher BMIs. As such, BMI is a useful indicator of overall fitness for a large group of people, but a poor tool for determining the health of an individual.

Statement of the problem:
The purpose of the study was to measure the effect of the endurance training on Body fat percentage of tribal students.
Further to analyze the effect of the two types of endurance training methods on Tribal students with three groups i.e., Control Group, Slow Continuous Method Group and Variable Pace Method Group.
Hypothesis of the Study:

There would be significant difference in Body fat of Tribal students before after 12 weeks training endurance training.

Significance of the Study:

This study helps the coaches and physical education teachers to know the effect of two types of endurance trainings on body fat of Tribal students.

Methodology:

The purpose of the study is to analyze the effect of two different endurance training methods (slow continuous and variable pace) on body fat of tribal students.

Sample:

Sixty (60) tribal student subjects are randomly assigned into three groups of twenty in each. The groups are named as Slow Continuous method group (SCMG), Variable pace method group (VPMG) and Control group (CG).

Tools: skin fold caliper, pen, recording sheets etc.

Skin fold caliper is a well known instrument used to determine the body fat composition. Accurate and standard techniques were used to measure the body fat of the subjects.

Procedure:

Skin fold measurements were taken from four (4) different standard anatomical sites around the body ie. Biceps, Triceps, Sub scapula and Supra-iliac. Tester gently pinched the skin at the appropriate site to raise a double layer of skin and underlying adipose tissue, but not the muscle. Calipers are then applied 1 cm below and at right angles to the pinch, and a reading in millimeters (mm) were taken within two seconds. The mean of two measurements were taken. If the two measurements differed greatly, a third measurement was taken, in such cases the median value was taken as final measurement.

Scoring: The Body fat scores obtained as follows.

Body fat % = 495/body Density-450.

{Whereas, body density = 1.1631-0.0632 log **(**Biceps+ Triceps + Sub-scapula+ Supra-iliac}

Statistical Technique:

Mean, Standard Deviation, S.E, paired differences in mean, Standard Deviation, CI, 't' value, d.f and p-values are applied to calculate the obtained data.

HYPOTHESIS TEST ON BODY FAT IN PRE-AND POST TEST OF TRIBAL STUDENTS IN CONTROL GROUP (CG), SLOW CONTINUOUS METHOD GROUP (SCMG) AND VARIABLE PACE METHOD GROUP (VPMG)

Results and Discussion on Hypothesis:

Results pertaining to the Hypothesis, the hypothesis would be a significant difference in body fat in pre- and post test of Tribal students in Slow Continuous Method Group (SCMG) and variable pace method group (VPMG) when compared with Control Group (CG),.

Table 1

Body fat	**Control Group**		**Slow Continuous Method Group**		**Variable Pace Method Group**	
	Pre test	Post test	Pre test	Post test	Pre test	Post test
Mean	6.72	6.71	6.36	6.04	6.14	5.51
SD	1.53	1.53	2.40	2.30	2.94	2.63

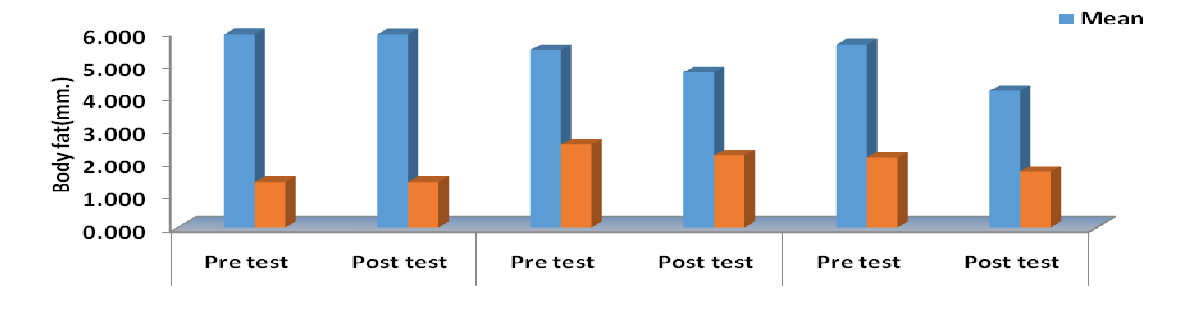

Table 2

Group	Test	Paired Differences					t	df	P- value
		Mean	SD	Std. Error Mean	95% CI of Diff.				
					Lower	Upper			
CG	Pre - post	0.002	0.005	0.001	0.000	0.005	1.706	19	0.114
SCM	Pre - post	0.323	0.238	0.053	0.211	0.434	6.047	19	0.000*
VPM	Pre -post	0.627	0.433	0.097	0.424	0.830	6.474	19	0.000*

** Critical value t=2.093. P - value significant at 0.05 levels, df=degree of freedom*

Results and Discussion:

Table 1 and 2 shows the Mean, Standard Deviation, S.E, paired differences in mean, Standard Deviation, CI, 't' value, d.f and p-values in pre-and post test of Tribal students in control group (CG), Slow Continuous Method Group (SCMG) and variable pace method group(VPM) in relation to their Body fat.

The body fat was measured by using the data of Skin fold caliper test before and after 12 weeks of training for the CG and two experimental groups (SCM and VPM). Further, the performance of SCMG and VPMG were measured on the completion of 12 weeks of training. The data is analyzed and the results are presented in Table 1 and 2, the graphical representation of data reveals the comparison between pre and post test for "means" of three groups, the post test "means" of the two training groups are presented in the Figure respectively.

The observed calculated paired *t- test* value for the data is presented in Table 2. From the table the collected data is presented in difference between the pre and post test performances of body fat of CG, SCMG and VPMG as calculated *t- test* values are 6.047 and 6.474 respectively and are greater than the required statistical *table value* 2.093 at 0.05 level. Whereas there is no significant difference in Control group as the calculated *t- test* values is 1.706 lesser than the required table value. Thus, the result indicates two experimental groups SCM and VPM are shown significance effect to reduce the body fat. Therefore, the hypothesis is accepted. Hence, the Effect of training is clearly visible with respect to Body fat for two methods SCM and VPM.

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Gender differences in health beliefs: A comparative study among rural population

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Abstract:
Hypertension is one of the non-communicable disease accounting for 10.8 percent of all deaths and 4.6 percent of all disability-adjusted life years in the country. There are several risk factors which contributes the hypertension. Health beliefs are important in preventing health risk behavior and give insight for individual to practice beneficial health behavior. By considering the increment of hypertension and utility of health beliefs, present study was undertaken to assess if there are any differences exists in health beliefs between males and females residing in rural areas. The present cross-sectional study conducted on a rural population of Jewargi Taluk 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 belief scale Robinson (2012). Descriptive statistics and one way Anova were used to analyze the findings. From the results it was observed that there was no significant difference found in the domain of perceived susceptibility, perceived severity, perceived barriers and self-efficacy. There was a significant difference found between males and females in the domain cues to action ($p<0.05$) and perceived benefits ($p<0.01$).

Introduction

Economic progress has empowered humankind successfully but the sedentary lifestyle has given way to non-communicable diseases. The number of deaths due to non-communicable diseases increased since 2000 in every region across the globe (WHO, 2014). World Health Organization (2011) suggests that a total number of deaths due to non-communicable disease in male was 29, 67,600 and 22, 73,800 in females. While the percentage of deaths due to non-communicable disease occurring under the age of 70 is 61.8% in males and 55.0% in females, indicating that the younger population is at a higher risk than older people (WHO 2011). Cardiovascular diseases are the leading causes of death due to non-communicable diseases in 2012 i.e., 46.2% of non-communicable disease deaths (WHO, 2014). Hypertension is the leading factor contributing to most of the cardio vascular diseases. Hypertension is defined as a condition in which systolic blood pressure is equal to or greater than 140 mmHg and/ or diastolic blood pressure equal to or greater than 90 mmHg (WHO, 2013). According to WHO (2013), 23.10% men and 22.60% of women over 25 years suffer from hypertension. Gupta (2016) reported that prevalence of hypertension increased from about 1% in 1950's to 15% in 1990's in urban and from 0.5 to 7% in rural populations; in the last twenty years prevalence of hypertension in urban locations has stabilized to about 25–30% but it has increased in rural populations from 15 to 25%.

Health beliefs are important in preventing health risk behavior and give insight for individual to practice beneficial health behavior. The health belief model, developed by Becker & Maiman (1975), is useful in analysing self-care activities related prevention of the diseases and focuses on behaviour related to the prevention of disease. Health beliefs are subjective evaluation of individual's susceptibility, severity, benefits and barriers towards healthy behavior and one's ability to successfully perform an action is self efficacy.

According to the WHO (2013) both men (23.10%) and women (22.60%) over 25 years suffer from hypertension, which indicates both men and women are equally effected by the hypertension. By considering the equal increment hypertension prevalence among male and females and utility of health beliefs in prevention of diseases and practice of health promoting behaviors, present study is undertaken to assess if there are any differences exists in health beliefs between males and females residing in rural areas.

Methods:

Research Design:

The present cross-sectional, quantitative study used a descriptive research design to assess the differences in health beliefs between males and females

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 belief scale (Robinson, 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 met the criteria of the study. If the participant meet 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. Analysis of the results was done by using of descriptive statistics and one way Anova.

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)	22(8.4)
	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 shows Gender differences in health belief subscales

Hypertension Belief Sub Scale	Gender	M	SD	F	p
Perceived Susceptibility	Male	3.34	0.47	0.898	0.344
	Female	3.41	0.55		
Perceived Severity	Male	3.71	0.35	0.327	0.071
	Female	3.61	0.5		
Cues to action	Male	1.91	0.85	3.96	0.048
	Female	1.7	0.79		
Perceived benefits	Male	3.63	0.359	7	0.009
	Female	3.51	0.353		
Perceived Barriers	Male	2.6	0.57	0.086	0.77
	Female	2.62	0.53		
Self-efficacy	Male	3.14	0.47	0.942	0.333
	Female	3.2	0.43		

Table 2 shows Gender differences in health belief subscales among 263 participants (Males 123 and female 140). Using analysis of variance (One Way ANOVA) it was revealed that there was no statistically significant difference between males and females in the domain perceived susceptibility (males M=3.34; SD=.47) (females M=3.41; SD.55). There was no statistically significant difference observed in the domain perceived severity between males and females (Males M=3.71; SD=.35) (females M=3.61; SD=0.5) There was a significant difference found between males and females in the domain cues to action ($p<0.05$), males found to have high mean score (M= 1.91; SD= 0.85) than females (1.7= .0; SD=0.79). There was significant difference found in the domain perceived benefits ($p<0.01$) between males (M=3.63; SD=.359) and females (M=3.51; SD=0.35). There was no significant difference found between males and females in the domain perceived barriers (males M= 2.6; SD= .57) (females M=2.62; SD =0.53). There was no significant difference found between males and females in the domain self-efficacy (males M= 3.14; SD= .47) (females M=3.2; SD =0.43)

Discussion:

Present study aimed at assessing the differences in the health beliefs between male and female participants residing in rural areas. From the results it was observed that there is no significant difference found in the domain of perceived susceptibility, perceived severity, perceived barriers and self-efficacy. There is a significant difference observed in the domain cues to action which male and females differed in receiving the information about the illness. These findings are in consistent with the study by Stefan (2015), reported that women were more interested in receiving more informal health-related information from close family members, other kin and friends/workmates than men did. There is a significant difference found between males and females in the domain perceived benefits. This could be attributed to the reason that in the present study males were less active in receiving the information than females which further influenced perceiving the benefits from engaging health promoting behaviors.

Conclusion:

From the findings it was observed that males and female participants differed in the domain of cues to action and perceived benefits. So in future research providing health information and giving interventions should be much more emphasized to the gender gap in trouble shooting health information behaviour.

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Review on myokines: A novel Intra and Inter Tissue Messengers

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Introduction

Molecular Exercise Endocrinology has many breakthrough researches in terms of exercise and performance. Sustained endurance events like long distance running is presently dominated by certain types of populations of the globe when compared to other populations leading to many questions about the role of physiology and genetics for such elite and extraordinary performances. Muscle tissue specificity like possession of type I fibers is a recognized physiological character for good running performances. But, beyond this character there have been several other metabolic processes that are responsible for such performances. Like oxygen saturation levels and carrying capacity, Lactate effusion and utilization, arterial resilience, density of peripheral vasculature, mitochondrial quantity and quality, mitochondrial enzymes, erythrocyte quality and quantity, efficient fat oxidation and high turnover of high energy substrates, inflammatory status of the tissues during exercise, tissue regeneration and protein synthesis during and after exhaustive exercise are some of the many factors responsible for the extraordinary performances in sustained high intensity running. Myokines such as Plasma Interleukin - 6, Plasma Interleukin - 8, Plasma Interleukin - 15, Plasma Irisin, Brain Derived Neurotrophic Factor protein (muscular origin), Leukemia Inhibitory Factor are discussed here under.

Interleukin-6 (IL-6):IL-6 produced during the muscle contraction, even sometimes a 100 fold increase is also seen after severe exercise, especially during the high intensity sustained muscular contraction is in response to the inflammatory effect of the exercise and higher amounts of IL-6 is seen after severe form of endurance exercise, where the high intensity exercise could induce inflammatory effect. But, certain individuals who are high in anti-inflammatory capacities are seen only marginal increase in IL-6 in response to the severe form of sustained running, hence low basal and post exercise IL-6 is considered as a better anti-inflammatory metabolic network of individuals.

Interleukin-8 (IL-8): Interleukin-8 primarily involves in chemo-kinetic response of neutrophils and macrophages in human body. Findings by researchers indicated that marked increase in plasma concentration of IL-8 is found in persons involving exhaustive exercise of eccentric muscle contractions (e.g.: Treadmill-running). The main function of IL-8 is Angiogenesis at the muscular level. This angiogenesis tends to produce new blood capillaries in the muscular system thus tends to produce new vasculature among conditioning athletes. This also tends to revive new vasculature among dead or non-functional skeletal muscles.

Interleukin-15 (IL-15): Interleukin-15 primarily acts as a stimulator for CD-8 and T-cell development which protects human body from foreign pathogens and viral infections. Researchers found that IL-15 has anabolic effect on muscle cells. IL-15 helps in prevention of skeletal muscle protein degeneration rate and muscle nuclear apoptosis, thus helps in muscle growth. IL-15 also plays a major role in muscle adipose tissue interaction. IL-15 helps in stimulation and secretion of adiponectin which plays vital role in prevention of growth of adipose tissue and IL15 also prevents lipid deposition by inhibiting lipogenesis by liver and preadipocyte differentiation.

Irisin (FNDC5) Irisin is a novel myokine which acts as a regulator in adipose tissue. Irisin helps in conversion of white adipose tissue to brown adipose tissue in the presence of PGC1α co-activator. Research studies indicated that resistant exercises in human beings tends to produce Irisin m-RNA in skeletal muscular system which is then converted to protein (Irisin). Irisin acts on white adipose tissue to become brown adipose tissue which has been specialize to dissipate chemical energy in the form of heat, thus play a vital role in thermoregulation. It's been reported that exercised induced biogenesis of mitochondria in skeletal muscles. This is been observed as a pathway of increasing endurance by an athlete caused increased in production of PGC1α co-activator in the blood, this increase in PGC1α co-activator causes increase in mitochondrial respiration and its biogenesis in the skeletal muscles. Some of the researchers also reported that long term skeletal muscle inactivity results in many changes such as lack of biogenesis of mitochondria, degeneration of muscle, down regulation of PGC1α and dramatic decrease in energy demand in skeletal muscles.

BDNF protein (muscle)BDNF(Brain derived neurotrophic factor) is generally produced by brain cells for the adaptation and learning purposes. It is been observed by various studies that BDNF protein cannot pass through blood brain barrier. This caught attention for many researches that presence of BDNF in blood after aerobic endurance. Some of the research findings suggests that BDNF is a novel myokine been produced in the muscle tissue during muscle contraction under aerobic endurance training. BDNF also helps in triggering satellite cells of skeletal muscles thus helps in differentiation and increase in muscle mass. Circulation levels of BDNF also increases plasma thrombocytes.

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Prevalence of Cardio Vascular Disease risk factors among rural population

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Abstract

Cardio vascular diseases are a leading cause of mortality among adults in India, and their risk factors, smoking, tobacco use, alcohol consumption, unhealthy eating habits, lack of physical activity, and obesity are common. Most of the risk factor surveys were emphasized on urban population but very less known about the rural population, so the present study aimed at assessing the prevalence of cardio vascular disease risk factors among rural population. The present study was a cross- sectional study conducted on rural population of Jewargi Taluka aged 18 years and above. A total of 263 participants were selected by multi stage random sampling technique, using the WHO steps questionnaire (WHO, 2005) various risk factors assessed (smoking, tobacco use, alcohol intake, physical inactivity, dietary habits and obesity,) among the participants. Descriptive statistics was used to analyze the results. From the findings it was observed that overall, use of tobacco use was found to be 12.16 per cent (male 26%; female 0%,) and alcohol use was 16 per cent (male 33.3; female 0.7%); 32.69% per cent reported physical activity less than recommended level by WHO, (male 32.5, female,32.9). 99.23per cent reported to consume less than five servings of fruits and vegetables/day)(male 99.18, female 99.28), 17.87 per cent were overweight (male 18.7%, female 17.1%), 5.32 per cent were o bese (male, 5.7 and 5.0 female). High prevalence of risk factors among rural population warrants an immediate attention. There is a need for careful monitoring and control of risk factors in rural area.Key words: Cardio vascular diseases, risk factors, rural population

Introduction:

Non communicable diseases burden increased rapidly in India; nearly two-thirds of the burden of non communicable diseases mortality in India is currently contributed by cardio vascular diseases related conditions (Patel et al., 2011). There are various risk factors which effect cardio vascular diseases such as physical inactivity, high intake of bad cholesterol, inadequate intake of fruits and vegetables, overweight, obesity and tobacco use. Smoking also increases the susceptibility to non communicable diseases, although largely through independent mechanisms (Srinath, Shah, Varghese, & Ramados 2005). Harsha et al. (2003) reported older age, higher body mass index, higher salt and alcohol consumption are well known risk factors for hypertension and Unhealthy eating habits and lack of physical activity play significant role significant role in the causation and progression of disease (Flegal, Pamuk & Rosenberg 2004).

India, being a culturally and socially diverse nation, differences would be noted in the region-wise prevalence, however, at the district level, especially in rural areas no data is available on the prevalence of cardio vascular risk factors, there is a major gap in knowledge, about the prevalence, therefore, the present study was undertaken, to assess the prevalence of cardio vascular risk factors among a rural population.

Method

The present cross-sectional used descriptive research design. Study was carried out in randomly selected Villages of Jewargi taluka namely, Kallur, Niradgi and Aralgundgi. Multi stage random sampling technique was used to select the study subjects whose age was 18 years and above. A total of 263 individuals participated in the study.

Survey Instruments

Researchers used Demographic data sheet and World Health Organization STEPs questionnaire to conduct the survey (WHO version 3.1, 2005).

Data collection A structured questionnaire was used to assess study subjects self reported risk factors such as (Smoking and smokeless tobacco use, alcohol consumption and dietary habits, physical activity). The participants who gave their consent for participation in the study after explaining them the purpose of study were included in the study. Participants who were seriously ill or hospitalized and having psychological problems were excluded from the study. The interview was followed by anthropometric (height, weight,). Body weight was measured in a standing position with the participant wearing no footwear in kilograms (kg) to the nearest 0.1kg by a modern digital weighing machine. After the participant stand straight without footwear on a flat floor, the height of the highest point of head (marked on the wall) was measured using a measuring tape to the nearest 1 cm.

Data was coded and analysed according to the WHO guidelines. Hours of physical activity of low, moderate and vigorous intensities were calculated by Metabolic Equivalent (MET) values using WHO guidelines. Physical activity was classified according to MET minutes per week into three groups viz., low (<600). Current smokers were defined as, individuals who are currently smoking any tobacco products, such as bidis, cigarettes, cigars or pipes. Alcohol consumption was defined as the, individuals who consumed a drink that contains alcohol such as beer, wine, whisky, locally prepared alcohol. Unhealthy diet was defined as consumption of less than five servings of fruits and vegetables per day. Body mass index (BMI) was calculated as weight in kilograms divided by height in meters squared. Individuals were grouped as overweight or obese if they had a BMI of ≥25 kg/m^2..

Statistical Analysis: All the data collected were entered in to the SPSS20. Descriptive statistics used to analyze the results.

Results

Table1 Shows the distribution of socio-demographic characteristic of study participants

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)	22(8.4)
	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)

Table 1 Presents frequency of socio demographic characteristics of the participants. In both the groups majority of the participants are with the age group of more than 46 (60% vs 53%), with no formal education (44.7 vs. 78.6%), self employed (35.8 vs. 9.3%), Unemployed Unable to work, and daily wage labourers (32.5 vs. 42.1%; 17.1 vs. 14.3%). Majority of the participants are married (85.4 vs. 80.7%) and belongs to Hindu religion (95.9 vs.94.3%)

Table 2 Prevalence of cardio vascular risk factors among study participants

	Male(N=123)		**Female (n=140)**		**Total** (263)
	N	**%**	**N**	**%**	**N%**
BMI					
Underweight (<18.5)	20	16.3	29	20.7	18.63
Normal (18.5-24.9)	73	59.3	80	57.1	58.17
Overweight (25.0-29.9)	23	18.7	24	17.1	17.87
Obese (≥30)	7	5.7	7	5	5.32
Smoking/Smokeless Tobacco					
Current Smoker	32	26	0	0	12.16
Current Smokeless Users	48	39	52	37.1	38.02
Alcohol					
Current Users	41	33.3	1	0.7	15.96
Almost daily use	39	31.7	1	0.7	15.2
Fruits and Vegetables Consumption					
Less than 5 servings of fruits and/or vegetables per day	122	99.18	139	99.28	99.23
Physical Activity					
Less than recommended level by WHO (<600 MET-minutes/week)	40	32.5	46	32.9	32.69

Table 2 Presents prevalence of Cardio Vascular disease risk factors profile among study participants. Of the 263 individuals who participated in the survey, 123 were males and 140 were females. The results of

present study reveals that prevalence of Overweight was found to be 18.7% among males and 17.1% among females and obesity was found to be 5.7 in males and 5.0 in females. The habit of smoking was more prevalent among males 26 % than females 0% with 12.5% overall distribution. 39 % of males and 37.1 % females have the habit of using smokeless tobacco with 38.2% overall prevalence. Prevalence of alcohol consumption was found to be 33.3% in males 0.7% in females with 15.96% overall prevalence. Consumption of less than five servings of fruits and vegetables per day was reported by 99.18% in males and 99.28% females with 99.23% overall prevalence.. Engaging in physical activity less than recommended level by WHO (<600 MET-minutes/week) was reported by 32.5% males and 32.9% females.

Discussion

In the present study assessed the prevalence of cardio vascular disease risk factors among 120 males and 143 female participants. In the present study prevalence of Overweight was found to be 18.7% among males and 17.1% among females and obesity was found to be 5.7 in males and 5.0 in females. Prevalence of overall overweight was 17.87% and obesity 5%, these findings more or less similar with the study conducted by Galav (2015) in rural and urban population of southern Rajasthan (overweight 17.86% and obese 3.57%). The increase in the prevalence of overweight and obesity partially may be attributed to the change in life style and indulging in health risk behaviors.

The habit of smoking is more prevalent among males 26 % than females 0% with 12.5% overall distribution. This may be partially attributed to the reason that females were not allowed smoke and smoking is not accepted by the Indian society. The present study results are more or less similar to the study conducted by less similar to the study conducted by Bansal, Goel, Saxena, Kandpal, Gray & Walker (2012); wherein, smoking was higher in males of tribal population (23.1% v/s 8.7%) and 19.6% versus 0.4% (Joshi, Hungund, Katti, Mallapur & Viveki 2013).

Results revealed that 39 % of males and 37.1 % females have the habit of using smokeless tobacco. From this it can be attributed that more or less both males and females are equally engaged in the usage smokeless tobacco, it might be probably attributed to the reason that taking smokeless tobacco is accepted by the elderly women and while collecting the data participants have reported that chewing smokeless tobacco helps them to have a easy digestion, so this might be the one of the reason to chew tobacco. The findings of present study are more or less similar with the study conducted by Joshi, Taksande, Kalantri, Jajoo, & Gupta (2013) in rural population of elderly of wardhan district i.e. 52.8% versus 43% in case of males and females respectively.

Prevalence of alcohol consumption was found to be 33.3% of males 0.7% of females This can be attributed to the fact that in the Indian population mostly men indulge in this unhealthy practice and females consuming alcohol is not accepted by the society and in many families. These findings were similar with the study conducted by Joshi, Taksande, Kalantri, Jajoo, & Gupta (2013) in rural population of elderly of wardhan district i.e. 22.8% versus 1% in case of males and females respectively.

Consumption of less than five servings of fruits and vegetables per day was reported by 99.18% in males and 99.28% females. It clearly indicates both male and female participants are taking less than recommended amount of fruits and vegetables. This can be attributed to the reason that most of the participants belong low-income group, affordability of fruits and vegetables could be an issue. These findings were more or less similar with the study conducted by Misra, Mini & Thankappan (2013) where 67.0 % of males and 69.3% of females consumed less than five servings of fruits and vegetables per day.

Engaging in physical activity less than recommended level by WHO (<600 MET-minutes/week) was reported by 32.5% males and 32.9% females. This indicates equal percent of male and female participants do not engage in less than recommended level by WHO. This might be due to the advancement of technology and habituation to the modern life style.

Conclusion: from the study it was observed that alcohol consumption and smoking was high among the males, smokeless tobacco use and physical activity less than recommended level by WHO, consumption of less than five servings of fruits and vegetables, overweight found to be more or less equal in both the male and female participants. High prevalence of hypertension and risk factors among rural population warrants an immediate attention. There is a need for careful monitoring and control of risk factors in rural area.

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A Comparative Study of Stress and Coping Strategies of Undergraduate Sports & Non-Sports Students

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Abstract:
The aim of this study is to determine the correlation between stressful events and physical symptoms. Additionally, the study also entails determining the coping strategies adopted by our respondentsas possible ways of handlingstressful situations. In order to verify our hypothesis, COPE Questionnaire and Burnout Inventory were applied to124 students (sportspersons and non-sportspersons from the University of Delhi, male and female, aged between 17 and 24 years). Sportspersons are the students who have participated in atleast two national level sports events. Main variables were assessed by age, gender and educational profile. Scores obtained for thepsychological dimensions, revealed significant differences regarding stress levels and also coping strategies.

Introduction

Oxford dictionary defines stress as "A state of affair involving demand on physical or mental energy". Psychologically, stress is defined as ''the process by which environmental events, threaten or challenge an organism's well -being and by which that organism responds to this threat'' (Gatchel, 1996). Stress is a term applied to various psychological (mental) and physiological (bodily) pressures experienced or felt by people throughout their lives. We, as human beings, are always in stress. It could be for social or emotional or financial or professional reasons. However, the extent of stress varies on person-to-person and situation-to-situation. Different persons may respond to same level of stress with varying levels. Stress is commonly associated with two simultaneous events: an external stimulus, called a stressor, and the physical and emotional responses to that stimulus (anxiety, fear, muscle tension, heart rate, and so on). Stress can come from the environment, or from a person`s body or mind (Reece, Brandt & Howie, 2010).

Actually, stress is a reaction to the situation, when brain takes the pressure our body releases hormones who prepares us to fight against that situation. In some situation when we feel stressed we prepare ourselves and respond in a very controlled or balance way and overcome with that situation successfully. But in some situation we take more stress and react weirdly and prove as failure. In that way the stress plays both positive and negative role. Stress is good when the situation offers an opportunity to a person to gain something. It acts as a motivator for peak performance. Stress is negative when a person faces social, physical, organizational and emotional problems.

In a study conducted with PG & PhD students from Mysore University (Ghaderi, Venkatesh et al, 2009 - *Depression, Anxiety and Stress among the Indian and Iranian Students*), the respondents (80 Indian & 80 Iranian, both male and female students) revealed that the Depression, Anxiety and Stress level of Indian students are significantly higher than those of Iranian students. However gender differences are not found significant. Therefore there is a need to recognize stress as an important aspect to study and understand how to keep it to productive levels.

Theoretical Issues

Causes of Stress

The situations and pressures that cause stress are known as stressors. We usually think of stressors as being negative, such as an exhausting work schedule or a rocky relationship. However, anything that puts high demands on you can be stressful. This includes positive events such as getting married, buying a house, going to college, or receiving a promotion. Of course, not all stress is caused by external factors. Stress can also be internal or self-generated, when you worry excessively about something that may or may not happen, or have irrational, pessimistic thoughts about life.

Common external causes of stress	Common internal causes of stress
1. Lifestage changes	1. Chronic worry
2. Professinal reasons	2. Pessimism
3. Relationships	3. Rigid thinking, lack of flexibility
4. Financial	4. Negative self-talk
5. Time Management	5. Unrealistic expectations/Perfectionism
6. Personal & Loved ones	6. All-or-nothing attitude

Signs & Symptoms of Stress

Cognitive Symptoms	***Emotional Symptoms***
1. Memory problems *2. Lack of concentration* *3. Poor judgment* *4. Seeing only the negative* *5. Anxious or racing thoughts* *6. Constant worrying*	*1. Depression or general unhappiness* *2. Anxiety and agitation* *3. Moodiness, irritability, or anger* *4. Feeling overwhelmed* *5. Loneliness and isolation* *6. Other mental or emotional health problems*
Physical Symptoms	***Behavioral Symptoms***
1. Aches and pains *2. Diarrhea or constipation* *3. Nausea, dizziness* *4. Chest pain, rapid heart rate* *5. Loss of sex drive* *6. Frequent colds or flu*	*1. Eating disorder* *2. Sleeping disorder* *3. Withdrawing from others* *4. Procrastinating or neglecting responsibilities* *5. Consuming alcohol, cigarettes, or drugs to relax* *6. Nervous habits (e.g. nail biting, pacing)*

Responding to Stress

The response to stress consists of three components: the stress triggering event or thought (stressor), the individual perception of it, and the response to it. The physiological response manifest in decreased levels of professional/academic competitive performance, interpersonal problems etc. (Reece, Brandt & Howie, 2010) and requires the development of coping strategies to stress and/or burnout. According to Schaufeli & Green (2008), burnout is ‘‘a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding”. Gould defined burnout, as “the manifestation or consequence of the situational, cognitive, physiologic, and behavioral components of excessive stress”. From the sports point of view, burnout has been defined as ‘‘a psychological, emotional, and physical withdrawal from a formerly pursued and enjoyable sport as a result of excessive stress which acts on the athlete over time.

To cope mean “to struggle or deal, especially on fairly even terms or with some degree of success; to face and deal with responsibilities, problems, or difficulties, especially successfully or in a calm or adequate manner” (source: http://dictionary.reference.com)

Coping Strategies
Coping Strategiesare a set of preventive and corrective actions through either physical activity or meditation and relaxation techniques. A regular physical activity reduces the risk of hypertension, heart disease, diabetes and other diseases (Allender Hutchinson and foster 2008). Physical activities are one of most effective way to handle stress because it improves overall fitness too, to overcome emotional stress and tension. Physical activities help us to stay healthy and healthy mind is better equipped to overcome with all kinds of stress

Meditation trains mind to stay calm. Through the process of meditation, one focuses upon the center and tries to quiet the mind and the body from all kind of distractions. A number of relaxation techniques explained below offer ways to measure physiological attributes and suggested activities to reduce these physiological symptoms.

- **Bio Feedback**: Monitoring equipmentis used to provide the information of the body. Usually, such information would not be available to thesubject. Parameters like monitor heart rate, blood pressure, brain activity, stomach acidity, muscle tension and experiment with postural changes, breathing technique or thinking pattern are recorded. By receiving this feedback, one can learn to identify the processes that achieve the desired results, such asreduction in heart rate and blood pressure. Biofeedback may even be used to deal with a variety of psychological and physical conditions of the elite sportsmen, however must be used by only trained professional because measuring devices are involved.
- **Relaxation Response:** In Benson’s relaxation response techniques one is required to repeat one word or phrase at least 10-20 minutes per day while quietly seated. It helps to divert attention from the other negative thought or stress.Its importance has been documented as in the reduction of blood pressure and other bodily stress responses.
- **Progressive Muscle Relaxation:**Jacobson’s Progressive muscle relaxation is a deep relaxation technique that has been used to effectively control stress and anxiety. It is based upon the premise that mental calmness is a natural result of physical relaxation. It can be learned by anyone and requires only 10-20 minutes per day to practice.
- **Tai Chi**: A 12th Century Taoist monk Zhang Sanfeng is believed to be the founder of Tai Chi. It is generally known as “Meditation in motion”, but it later came to be known as “Medication in motion.” In Tai Chi exercises main focus is given on breath and small range slow to large movements. The main idea is to help to relax the mind and mobilize the body’s energy. Tai Chi is very safe and no fancy equipment is used.
- **Yoga**:Yoga is derived from the Sanskrit word “ Yuj” which means “to unite” or “to join”. The main aim of yoga is to bring together the body, mind and soul through asanas. Maharishi Patanjali is known as the “father of yoga”, who advocated “Ashtanga Yoga” for all round development of human personality.

Researches on How to Cope with Stress
A coping strategy is a deliberate, rationally planned set of activities designed and implemented to deal successfully with unwelcome situations, persons or circumstances. In the sport domain ``there are numerous situations that athletes may find challenging, threatening, or harmful`` including ‘‘avoiding or recovering from injury, playing an important game, media attention, poor refereeing, bad weather conditions, provocative opponents’’(Ntoumanis et al. 1999). Enhanced planning, more information, greater effort, or new skill acquisition may be some of the strategies that will enable someone to contend with a situation or an opponent more effectively and thus reduce anxiety (Ntoumanis, 1999). According to Maltby & Day (2001), one of the benefits of physical exercise is to improve the psychological well being of a person; in particular, physical exercise is thought to reduce depression and stress.

Research methodology

Hypotheses
This empirical research aims to identify the stress level for our sample, and the most frequently used coping strategies by them. Our first hypothesis was that new entrants (junior students) are confronted to a higher level of stress than their senior counterparts, and this impacts on the level of their adaptability and integration in the academic field.

We also assumed that there is a significant difference between boys & girl students, with respect to the selection ofstrategies to cope with various requirements of a student's lifestyle.

The third hypothesis was that sportspersons have developed more effective coping strategies thannon-sportspersons, during their training process and competitive participation.

Research instruments
The two psychological instruments used on our respondents.

1. The Maslach Burnout Inventory (1981) is a 25-item survey that assesses the level of professional burnout, mainly in human service, education, business, and other professions, in the following three areas: 1) Emotional exhaustion, by measuring feelings of being emotionally overextended and exhausted by one's work; 2) Depersonalization, by measuring the lack of feeling and impersonal response toward recipients of one's service, care treatment, or instruction; 3) Personal accomplishment, by measuring feelings of competence and successful achievement in one's work.
2. The COPE Questionnaire (Carver, Scheier & Weintraub, 1989) is a 53-item survey, designed to measure conceptually distinct aspects of: a) problem-focused coping (active coping, planning, suppression activities, restraint coping, seeking of instrumental social support); b) aspects of what might be viewed as emotion-focused coping (seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion); c) coping responses that arguably are less useful (focus on and venting of emotions, behavioral disengagement, mental disengagement).

Subjects
The study sample included 124 students from the University of Delhi (equal no. of boys & girls), enrolled in the undergraduate courses (covering first, second and third year of study), aged between 17 and 24 years and also sportspersons, who according to our criteria are the ones who have participated in atleast 2 national level sports events.
Scoring and interpretation
The strategy of data analysis was designed based on the principles of comparative research among the stratified group, in order to detect differences and / or similarities of the respondents, regarding the stress levels (reflected in decreased personal achievements and emotional exhaustion) and also, the differences concerning the chosen more or less effective strategies, in order to cope with stress.

Main variables were assessed by age, gender, or level and extent of sports participation (frequency of participation and number of years the subject has been playing). In order to understand the relationship between the main variables, Pearson's correlation coefficients were calculated.

The statistical analysis of the Maslach Burnout Inventory data, indicates a medium level of stress for allparticipants, highlighting the dimensions with higher scores, as following:

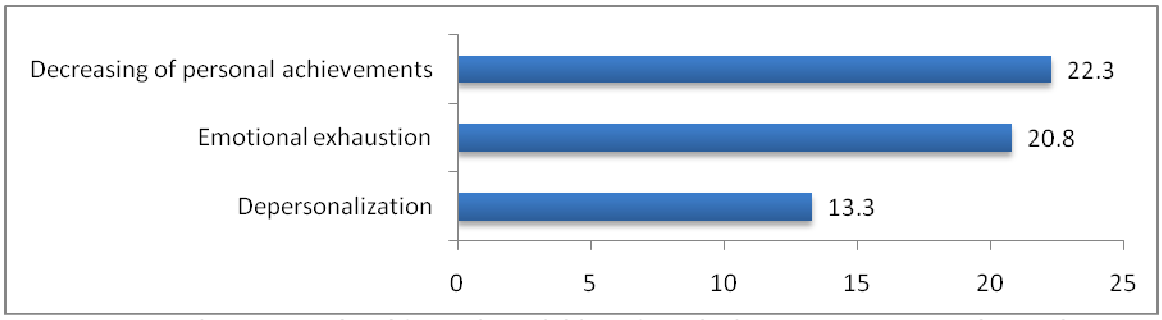

Fig. 1 Stress level for main variables of Maslach Burnout Inventory (N=124)

- Decreasing of personal achievements – 22.3 pts. (out of 30 pts.)
- Emotional exhaustion – 20.8 pts. (out of 27 pts.)
- Depersonalization –13.3 pts. (out of 18 pts.)

The results of COPEQuestionnaire are descriptive for the coping strategies, which the subjects are most likely to use (for a range from 4-16 points):

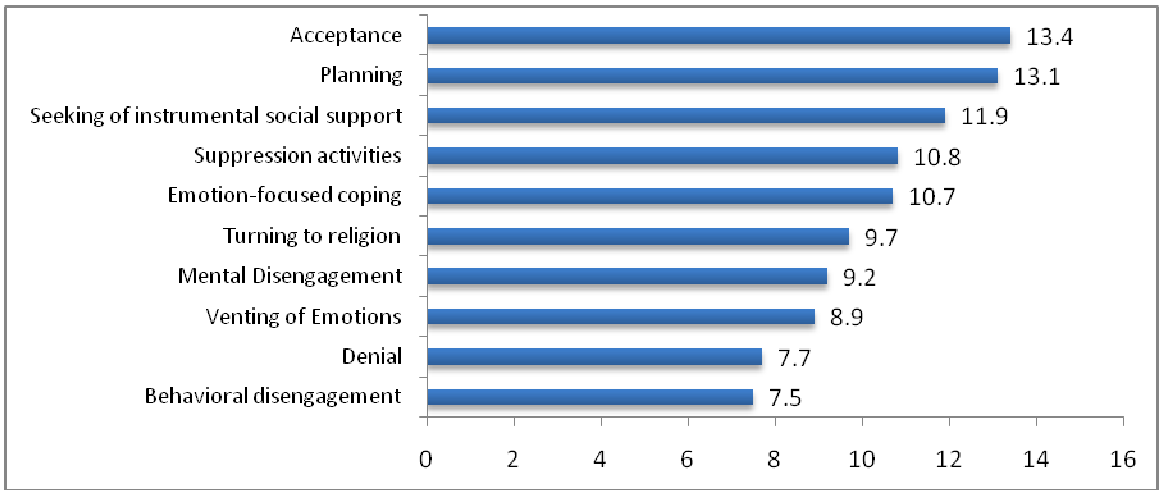

Fig. 2 Hierarchy in ascending order of most commonly used coping strategies (N=124)

Findings and results

Hypothesis testing

The analysis of the results has verified the general hypothesis, that there are significant differences between the studied groups, on the criteria academic experience, gender andlevel and extent of sports participation.

In Table 1, the results show significant differences of the respondents' perceptions based upon their *academicexperience*. The new entrants seem to benefit less from"active coping" strategies and "planning", than seniorstudents, who also reported that often use "seeking of instrumental support" and "focus" on stressful problems.

	New Entrants (Juniors)	Senior Students	p-value (Student's t-test)
Active coping	11.27	12.15	p<0.01
Planning activities	12.09	13.20	p<0.01
Focus on problems	10.45	11.22	p<0.05
Seeking of instrumental support	11.21	12.65	p<0.05

Table 1 Differences in coping strategies on the *academic experience* criteria, for a range of 4-16 points

In Table 2 (showing the differences on gender criteria), we can see that generally, girls seem to be more determined to "plan the activities" and "seeking of emotional support" in comparison with boys. The "denial" score is lower to girls than boys'. Further, female students are more willing to talk and share their personal struggles with their peers and are more "religion oriented" than men. Both female and male students commented that they enjoy the "instrumental support".

	Girls	Boys	p-value (Student's t-test)
Planning activities	11.33	10.61	p<0.01
Religion oriented	10.28	9.19	p<0.05
Denial	7.51	8.37	p<0.01
Seeking of emotional support	11.75	10.62	p<0.01

Table 2 Differences in coping strategies on gender criteria, for a range of 4-16 points

The findings illustrated in Table 3, highlight the variation of the respondents' coping strategies, based upon their sports experience. For example, the sportspersons seem to benefit a lot from"active coping"strategy,"planning activities" and "focusing" on stressful problems, than non-sportspersons. This aspect can be explainedby the psychological techniques developed and used in professional sport (e.g. "goal settings", "attention style", "optimal focusing" etc.). We can see a maximum score of 16 points, reported by all sportspersons, on "planning".

	Less than 4 years in Sports	More than 4 years in Sports	p-value (Student's t-test)
Planning activities	13.22	16.00	p<0.01
Active Coping	11.22	15.00	p<0.05
Focus on stressful problems	10.88`	15.00	p<0.01

Table 3 Differences in coping strategies on the athletic experience criteria, for a range from 4-16 points

The results presented in the Table 4 suggest that even when the general level of stress is medium (as we can see in Figure 1), sportspersons are experiencing a higher level of "depersonalization" than non-sportspersons, while the dimension "decrease of personal achievements" and "emotional exhaustion" is at a similar level. In our opinion, the competitive stress adding to the stress derived from academic course requirements may induce even more maladaptive reactions to sportspersons, by affecting their self-identity and self-esteem.

	Non Sportspersons	Sportspersons	Maximum Range	p-value (Student's t-test)
Depersonalization	12.62	14	18 points	p<0.05
Decreasing of personal achievements	22.61	22	30 points	p<0.05
Achievements	20.92	20.76	27 points	p<0.05

Table 4 Differences in coping strategies on the *athletic experience* criteria

Correlation

Pearson's bivariate correlation (significant at the 0.01 level), showed the following relationship between the following variables:

a) "Decreasing of personal achievement" is positively correlated to "emotional breakdown" (.291**), "behavioral passivity" (.299**) and negatively correlated to "active coping" (-.402**) and "planning" (-.281**);

b) “Depersonalization” is positively correlated to “decreasing of personal achievement” (.353**), “emotional breakdown” (.338**) and risk of “substance use” (.341**); This dimension is also negatively correlated to “planning”(-.30**) and “acceptance”(-.216**);
c) “Active coping” strategy positively correlates to “planning” (.614**), “focusing”(.402**), “seeking of instrumental support” (.273**) and "emotional support”(.241**);
d) “Denial” as a coping strategy is highly related to the risk of “emotional breakdown” (.412**), “mental passivity”(.459**) and “behavioural passivity” (.388**).

Conclusion

The findings of this study are in coherence with the results of some other researches conducted in the area of thestudents’ adaptability to the academic environment and stress management. As mentioned in theoretical issues, there exists a positive aspect of stress. It can act as a powerful stimulus for growth and can be a motivator for a person to deliver his best. It can also promote greater awareness and help someone focus on getting tasks completed quickly and efficiently (Tenenbaum & Eklund, 2007).

Our results confirmed the first hypothesis, that the new entrants from our sample, experience a higher level of stress than senior students and they do not have adequate effective coping strategies, especially when compared with their senior counterparts. In our opinion, the stress level is even higher if the new entrants found themselves suddenly at a greater distance from their families and homes or they are struggling with financial difficulties. In some cases, they are needed to work part-time, in order to support their studies. For such subjects, some forms of occupational stress are present and are mainly related to multitasking, long working hours/irregular schedules, work and family transitions, difficulty to adapt to the academic life and its requirements, and pressure to highly perform at college.Our second hypothesis was confirmed by the significant differences between girls and boys, regarding the most commonly used strategies, which are the emotion-focused strategies for women and the problem-focused strategies for men, both use primarily by the respondents in order to reduce stress.Concerning our third hypothesis, we can conclude that sportspersons benefit a lot from the development of psychological skills during their performance activity than non sportspersons, but we can also say that the high “depersonalization” score, indicates a general lack of mastery for relaxation techniques.

The study reveals an average level of stress for the entire sample. Regarding the limitation of our study is that wecould not highlight the relationship between the level of stress and the involvement in sport in an organized and systematic manner (e.g. everyday practice of fitness, jogging etc.), which could bring more relaxation and recreation in the respondents lives, being an effective method to fight against stress as this could be taken up even by non-sportspersons.

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"Obesity : Health Awareness "

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Abstract :

"Childhood obesity is best tackled at home through improved parental involvement, increased physical exercise, better diet and restraint from eating". – bob Filner Obesity is becoming one of the burning problems all over the world. Obesity can occur at any age. It is one of the most deterrent health hazards in the world, affecting more than 30% of the global population. Not only has is sparked a lot of talk, but it has also begun to be ranked as a serious risk comparable to certain diseases. Obesity is a serious risk to our health. In fact, some doctors even call obesity itself a disease.

Introduction :

We live in an automated world were most of the activities that used to require strenuous physical exertion, can be accomplished by machines with the simple pull of a handle or push of a button. Automobiles, elevators, escalators, telephone, intercoms, remote controls, electric garage door openers, etc. are all modern day commodities that minimize the amount of movement and efforts required by the human body. The lack of activity and improper diet which has influenced the lifestyle of modern day people are the contributing factors for developing obesity. However, there is nothing stopping us from changing the habits we have not into better ones that prolong our life. Even those who are not obese should be aware of how they aren't obese now, bad eating and exercise habits can have negative effects later on in life, even if there aren't any signs now.

Assessment of obesity :

With the recent interest in personal health, nutritional status and fitness, several methods of estimating body fat have been developed and used in clinical settings. Various ways to assess obesity are :

- Height / weight tables - Body mass index - Ponderal index - Waist hip ratio - Hydrostatic weighting - Skin fold measurements - Anthropometric measurements - Bio-impedance assessment (BIA)

Most commonly used and easiest and inexpensive method of assessing the body fat or obesity in body mass index.

BMI can be used to screen for both overweight and obesity in adults. Body mass index (BMI), is the formula we used to find out the ratio between weight and height. BMI is dividing the weight in kilograms by the square of the person's height in meters.

BMI = Weight (Kg) Height (Mt.)

Ration Under weight	% Fat < 18.5
Normal weight	18.5 – 24.9
Over weight	25.0 – 29.9
Obesity Class I	30.0 – 34.9
Obesity Class I	35.0 – 39.9
Obesity Class III	Above 40.0

Above shown ration of fat percentage are as per WHO.

Obesity occurs when there is an excess amount of fat one's body. Person is classified as obese if he has a BMI of 30 or higher. Many classify obesity as a disease that affects the rest of one's body in negative ways, leading to increased stress on the heart and other organs. People with a BMI of 25-29 are typically classified as overweight, however they also take the risk of becoming obese if they do not change their lifestyle or seek medical treatment.

Morbid obesity means that the individual weighs anywhere from 50 to 100% more than normal weight or they are more than 50 kilogram over normal weight. Morbid obesity literally means that the amount of overweight a person is carrying is life threatening, due to its related health risks. Morbid obesity also often significantly hinders or prevents as individual from accomplishing may day to day functions.

Causes obesity

Obesity is not a disease caused by one factor alone. That is why it is often difficult to treat. Combinations of several different physical and psychological elements that lead up to obesity are illustrated here:

- Diet - Lack of physical activity - Genetic or hereditary factors - Age - Other factors

Obesity treatment :

Diet therapy :

Because diet is directly linked with the amount of fat in our body, it is also one of the leading factors of obesity. If eating poor, unbalanced meals that are devoid of enough nutritional values, we automatically increase our risks of obesity. Therefore, individuals who are already obese should definitely focus on changing their eating habits if they want to successfully lose the excess fat. In order to do this, what kinds of food should they look out for?

They should avoid eating too many fatty or unhealthy foods, like fried foods, cakes, creamy, sauces, etc. Buy lots of vegetable and fruits. When buying grains, look for whole grains, multi grains, or other healthy alternatives to processed "white" foods. Also, make sure to drink enough water each and every day. When getting food at fast food or other restaurants, order things that have as much nutritional content as you can get. For example, many restaurants offer salads or vegetable dishes.

Physical activity :

Because our lives often entail a lot of sitting because of driving time and office jobs, many of us don't get the amount of exercise we really need. However, in order to burn fat, its really important that we do get enough activity into our day. How? Some of us can wake up earlier to take a walk. Others can park a little farther from the grocery store in order to get a little exercise in. some of us can even join a gym or get a personal trainer. No matter what your lifestyle, it's very important to find some way of getting more activity into your life. Even if it's just a little improvement, it can often show dramatic results in the way you feel.

Behavioral therapy :

Sometimes the reasons why we eat too much or can't get enough exercise in are due to emotional and other problems. Often, we know when this applies to us, because it seems like the reasons for obesity runs deeper than just an unhealthy diet and lack of exercise. In order to change our behaviour. It's often important to join a group with similar minded people or to seek help from friends and family. Even if you do it alone, make sure that you focus on exploring exactly what the problem is, being aware of it, and building yourself up so that you can combat stress and emotional problems.

Drug therapy and surgery :

For some people, when all other options don't work and their life is at stake, it becomes necessary to consider drug therapy or even surgery. Consult your doctor if you think you might be one of these people. However, because the side effects of these treatment plans can be dangerous, it's important to find a doctor you trust and/or a second opinion.

Weight loss myths :

People have fundamental misconceptions about how to accomplish the task. Here are some popular belief and why they are incorrect.

Severely restricting dictary carbohydrates is the best way to lose weight.

Fact : Most weight loss experts agree that managing calories rather than focusing exclusively on fat, carbohydrate or protein counts is the bottom line for weight loss success. Eating fewer calories than you burn each day will slim you down. Still, it's sound practice to limit dietary fat, not only because of fat's well known artery clogging effects, but also for its relatively high calorie count nine calories per gram compared to four in the same amount of carbohydrate or protein.

Conclusion :

"No health system is yet meeting the challenges of managing obesity, and no society has developed an effective strategy to prevent it" – The Lancet, 2006.

Nobody can escape the basic law of nature that governs weight gain or loss that any energy consumed as food and not used through activity must be stored in the body as fat. However, people vary in their eating and exercise habits, in their genetic susceptibility to gaining weight, in their natural metabolic rates and in many other factor that determine their rate of weight gain or loss.

Prevalence of obesity is rapidly growing worldwide. Prevention of obesity should begin early in life and it should be maintained through out the life. Obesity is a chronic disease that must be treated. A risk factor for many other diseases, obesity can significantly affect health longevity. There is a need to prevent or reverse unhealthy trends in diet and physical activity pattern existing in the today's society. There is a great need to refine many aspects of current practices in this area – changing behavior is difficult, but it can be done. Individual can overcome obesity by maintaining ideal weight through eating healthy food and regular exercise.

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"Visual Practice Enhance the Performance of Shot Putters"

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Abstract :

In any sport, a players success results from combinations of physical and mental abilities. You probably heard several of the different term that describe an athlete's mental preparation for competition, including visualization, mental rehearsal, imaging and mental practice. These terms all refers to creating as recreating an expreience in the mind. In any sport, a player's success results from combinations of physical and mental abilities. You probably heard several of the different term that describe an athlete's mental preparation for competition, including visualization, mental rehearsat, imaging and mental practice. These terms all refers to creating as recreating an experience in the mind. According to Harris and Harris (1984) imagery is of the three categories. One of these is called external imagery and is considered to be outside of you like watching a movie or videoptape of your performance. Internal imagery is form outside you and considered to be releasing what you actually see with your own eyes when you execute your skills.

Introduction :

Physical education professional need to perform an inventory of training, hardware, and software available within their own organizations. There may be many existing resources of which professionals are simply unaware. In addition, it may help to find a "techno buddy" within the organization whom the physical education professional can ask for help and share information about successful technology undetakings. Physical educators need to make use of the latest technologies when promoting their programs. Establishing a CD-ROM wiht animation images and interactive for all physical education programme is an effective way to provide factual and in depth information

Science and technology has brought wonders, and its applications in the field of sports has been miraculous. It may be welcome to apply science and technology for improvement of performance. But, what extent technology impacts the performance? Before declaring that the study is the limit, we msut respond seriously while trying to effect a change in the human nature and natural capacities.

Methodology :

Twenty subjects were selected from Dr. Sivanthi Aditanar College of Physical Education. Tiruchendur and they were divided into two groups of ten subjects each. Group 1 underwent technique training with visual practice and Group II underwent technique training without visual practice. The shot put performance was assessed by competitive method and technique was assessed by expert rating method. The data were collected before and immediately after the training period. The collected data were analyzed by using depentent 't' test and analysis of convariance (ANCOVA) on technique and performance of shot put.

Analysis fo the data :

The analysis of dependent 't' test on the data obtained for selected dependent variables of the pre test and post test of experimental groups have been analyzed and presented in Table 1.

Table 1 Mean and dependent 't' test for the pre and post test on criterion variables

Creation variables Technique (in numbers)	Mean and (pre-test)	Technique training and visual	Technique training without visual
Shotput (in means)	6.4	6.2	6.2
	8.6	7.6	7.6
	4.12*	3.56*	3.56*
	8.62	8.50	8.50
	9.75	9.15	9.15
	5.14*	3.95*	3.95*

* Signifianct at .05 leve. (Table value required for signifiance at .05 level for 't' test with df 9 is 2.26)

Table 1 show that the dependent 't'-test values of techniques and performance of shotput between the pre and post tests means of experimental groups were greater than the table value of 2.26 with df 9 at .05 level of confidence. It is concluded that experimental group I and II had significant improvement in the performance. The analysis of covariance on technique and shotput performance of experimental groups have been analyzed and presented in Table II.

Table II:Analysis of covariance on criterion variables of experimental groups

Creation variables Technique (in numbers)	Experimental Group I	Experimental Group II	Source of variance	Sum of squares	df	Mean squares	'F'-ratio
Technique (in numbers)	8.53	7.52	B W	24.25 25.25	1 17	24.25 4.95	4.90*
Shotput (meter)	9.70	9.10	B W	21.12 52.47	1 17	21.15 3.08	6.87*

* Significant at .05 level of confidence (the table value required for significance at .05 level with df 1 and 17 is 4.45) Table II shows the obtained F-ratio values of techniques and shotput performance for adjusted post test mean were 4.90 and 6.87 respectively which are more than the table value of 4.45 for df 1 and 17 required for significant at .05 level of confidence. The result of the study indicate that there was significant difference between the adjusted post test means of experimental groups on the development technique and performance of shotput.

Conclusion :

Performance of technique and shoput were significantly improved on both experimental groups due to the effect of training. It is concluded that there was significant difference between the technique training without visual practice group. However, technique training with visual practice is better than the technique training without visual practice. Studies on the theories of learning have demonstrated that more than one sensory channel dramatically improves comprehension and learning. The following hypothesis appears to be largely indicated. "I hear and I forget, I see and I remember, I do and I understand". Multimedia tools incorporate the above mentioned features and hence have the potential to result in optimal learning.

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Students Football Athletes Coaching and Training Program (An Evaluative Study in Student Training and Education Program)

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Abstract
This study aims to develop and test the feasibility of a soccer training model for youth athlete based on the Long-Term Athlete Development (LTAD). The soccer training model is declared eligible by a coaching material expert, a soccer training expert and a soccer coach for youth athlete. The research and development that is carried out refers to Borg and Gall (1983) development procedure simplified only to the limit of expert validation test and product revision. Data retrieval is done with expert validation, i.e. expert coaching material, soccer training expert and soccer coach for youth athlete. Data analysis is done by converting quantitative data to qualitative data using Likert scale guidance. The results showed that the model of soccer training developed is feasible, based on the validation of expert materials of coaching seen from several aspects. Aspects of training content quality content with 72% eligibility level. Aspects of training content content with 94% eligibility level. Feasibility aspects of the training with 66% feasibility level. Aspects of sport coaching concept with 60% eligibility level. While the feasibility assessment of soccer training experts based on the basic concept aspects of training with 72% eligibility level. Aspects of development stage of the training with 82% eligibility level. Quality aspects of training materials with 68% eligibility. Assessment of soccer coach for youth athlete eligibility based on training aspect with level of 69% eligibility. Aspects of training design with 65% eligibility level. Material aspect with 69% eligibility level. Overall assessment of training eligibility is 68% with "Good" category.
Keywords: Soccer Training Model, Youth Athlete, LTAD

Introduction

Soccer is the most popular sport and attracts the attention of the world community today. The sheer amount of information about soccer presented by electronic media and print media is one of the most obvious indications of the claim that soccer is the most popular sport. The journey to become a professional and reliable soccerer is very long and tortuous, it takes intensive training to continue in accordance with the appropriate methods, systems and training model of soccer practice.The current soccer training model is a major concern because the function of the training model is very important in the coaching process. According to Chondel (2013) the efforts undertaken by Germany by reforming the training model of early age coaching is manifested into a guidebook. The result is that Germany can successfully bring up new names like Mario Goetze (20), Lewis Holtby (20), Julian Draxler (19), Ilkay Gundogan (21), and others who are all under the age of 22. With the training model that must be applied when doing the training consciously or unconsciously such actions indicate the existence of uniform pattern of education and games from an early age.

During this time throughout Indonesia soccer coaching have not or do not apply the standard training model to be applied in the training in soccer respectively. Training has been dependent on the initiatives and experience of existing trainers. These trainers work hard on how to apply science or soccer experience to their foster children in their own way. The training has not been fully able to develop the talent of the players and sometimes there is something wrong in applying the practice method for the students.

Articles written by Sinaga (2012), playing exercises for ages 8-12 can improve the results of dribbling practice. While in the article written by Rinaldi (2012), Siregar (2013) and Zulhairil (2013), concluded that using variations of exercise can improve the results of passing and shooting practice because by giving variations of exercise will not easily arise saturated and bored because at the age the child is still very unstable, easy to feel bored and bored so that the application of appropriate methods and training materials is very big influence in the process of soccer coaching.

With the right soccer coaching training model is expected to improve the quality of training, directed and appropriate age, so as to deliver students to develop talent and reach its peak potential and achievement. Training or nurturing early childhood is much different than training senior players, training early childhood is much more difficult because it teaches the basic foundations of playing the right soccer, not only that a trainer should be able to pay attention to the child's development in terms of physical, psychological, growth and Motor ability. If the application of train there is a mistake it will result in damage both in terms of physical, pyromological and growth so that it can affect the future of the child.

Therefore an early childhood trainer must master the theoretical and training methodology in which there are many sport performance achievement theories that support for practice-training activities. The theory of exercise or sportsmanship in the training process is anatomy, health, psychology, physiology, biomechanics, tests and measurements, stratics, history, sociology, nutrition, education, and motor learning, these are all supporting knowledge in the process of practicing according to (Bompa 2009), therefore a standardized reference is needed in order to be a guide for trainings and trainers, in order to achieve the desired goals and objectives in promoting national soccer, in addition to the importance of a plan and a standard reference is (1) Can determine clearly achieved direction, (2) Can achieve high efficiency and effectiveness, (3) Facilitate in identifying obstacles in reaching goal, (4) As a control tool whether the goal has been achieved or not.

In addition, the training plan is absolutely necessary in the training of sports education to develop a youth soccer, Seeing the above problems the authors have a limit "Planning is the specialty of the goals to be achieved, as well as the ways pursued to achieve these goals. This limitation implies (1) The planner involves the process of setting goals about the desired future state, (2) Selecting and determining the way to be taken from all possible alternatives, (3) Attempts to achieve that goal. Therefore, this should be the basis of the Indonesian sports scientists to design a sports training model to improve the sports system in Indonesia. Based on the above description, the researcher intends to conduct research on "Soccer training model in youth athlete based on the long term athlete development", this is the basis that this research will be useful for the progress of Indonesian soccer, because there has been no research on it, so the focus of this research is to develop a occer training model in youth athlete that adopts the training model of the United States with the title of US book Soccer Training model and supported by long-term athlete coaching theory of Long-Term Athlete Development by Istvan Balyi.

Method

In this study the authors use research and development (R & D) research methods or research and development methods. Research and Development is a research method used to produce a particular product, and test the effectiveness of the product, the resulting product can be diverse. According to Sugiyono (2011: 297), Research and Development research methods which hereinafter abbreviated to R & D are research methods used to produce specific products, and test the effectiveness of those products. Sukmadinata (2012: 164) said the developed product is not always in the form of software or software, such as computer program for data processing, classroom learning or educational model, learning, training, evaluation and management, but also in the form of hardware or hardware such as books, modules, learning media aids in the classroom.

In this study, the product that will be developed is a soccer training model design based on sports coaching education. According to Sujadi (2003) Research and Development or Research and Development (R & D) is a process or steps to develop a new product, or improve the existing product, which can be justified. As mentioned above, the research and development method examines the effectiveness of a new product and has gone through refinement steps. But due to limited research time, researchers limit the research only to developing existing products. Here researchers are developing a soccer training training model from the United States with the U.S. training model title. Soccer Training model composed by Dr. Javier Perez and Claudio Reyna, the training model is developed in accordance with the potential and cultural culture of the Indonesian nation

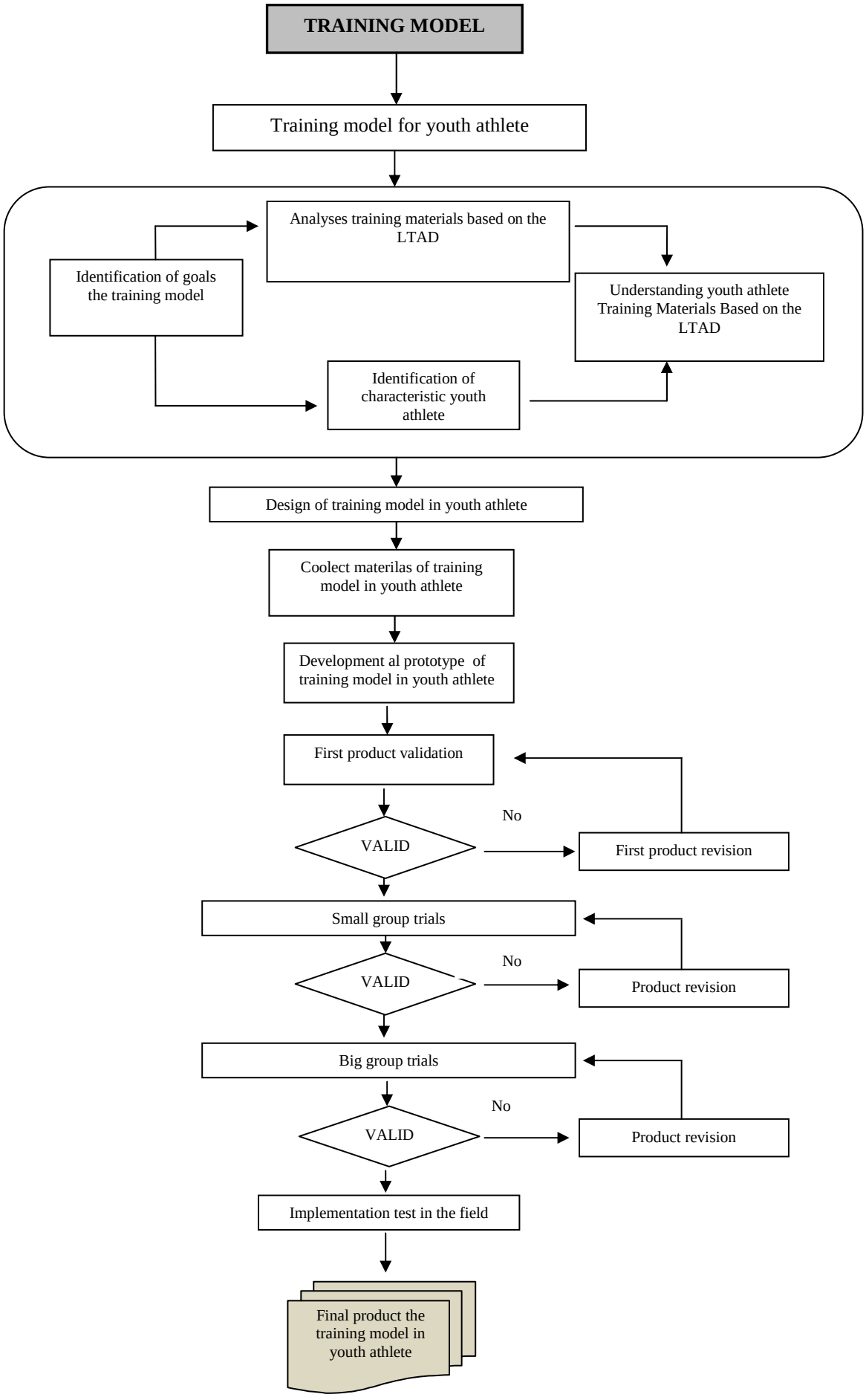

Chart 1. Development procedure training model in youth athlete based on the LTAD

Results And Discussion

The product in this research and development is in the form of the soccer training model in youth athlete based on the Long Term Athlete Development (LTAD). The development of soccer training model based on LTAD can be used by trainers or educators in the process of coaching and training at a soccer training, through training and upgrading of trainers and educators to be able to apply drills and training materials in the formation and training of juvenile athletes which corresponds to the growth and development of learners, in order to get results according to the wishes and ideals of quality human development and the development of national sports.

The research and development carried out refers to Borg and Gall's simplified development procedure only at the limits of expert validation tests and product revisions. The first step, to collect information and observation. Information gathering is done by conducting preliminary study in the field to see the problems faced in soccer coaching and training, in soccer trainings in conducting coaching and training for adolescent athletes in accordance with the procedures in the world of modern sport coaching, reading the various literature that support in youth soccer coaching and studying the soccer training model to develop training programs tailored to the needs of learners according to the age group and the development of learners in the training.

Observation is done by looking at the problems experienced in the field by the coach both the coaching staff at the soccer training. The second step, which is to determine the training model materials and design that will be developed to support the process of coaching and training in soccer training model based on LTAD. Here is a picture of a major component of the soccer training model in youth athlete based on the LTAD.

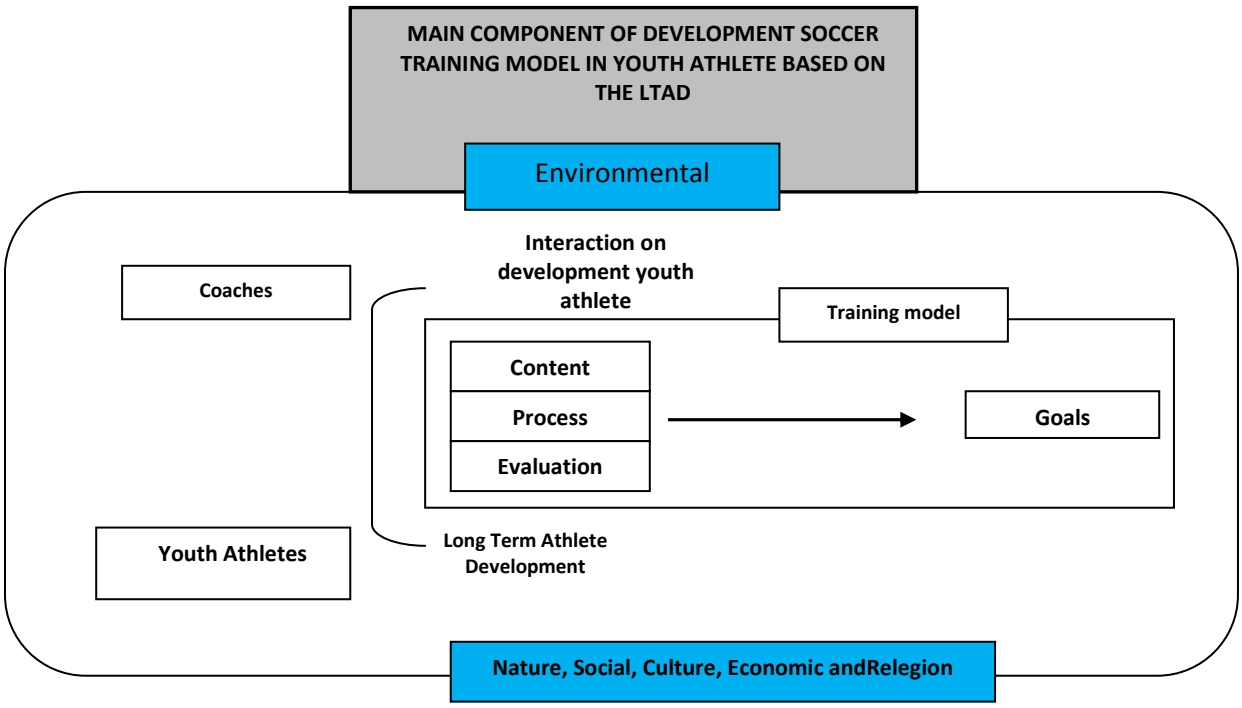

Chart 2. Main component of soccer training model in youth athlete based on the LTAD

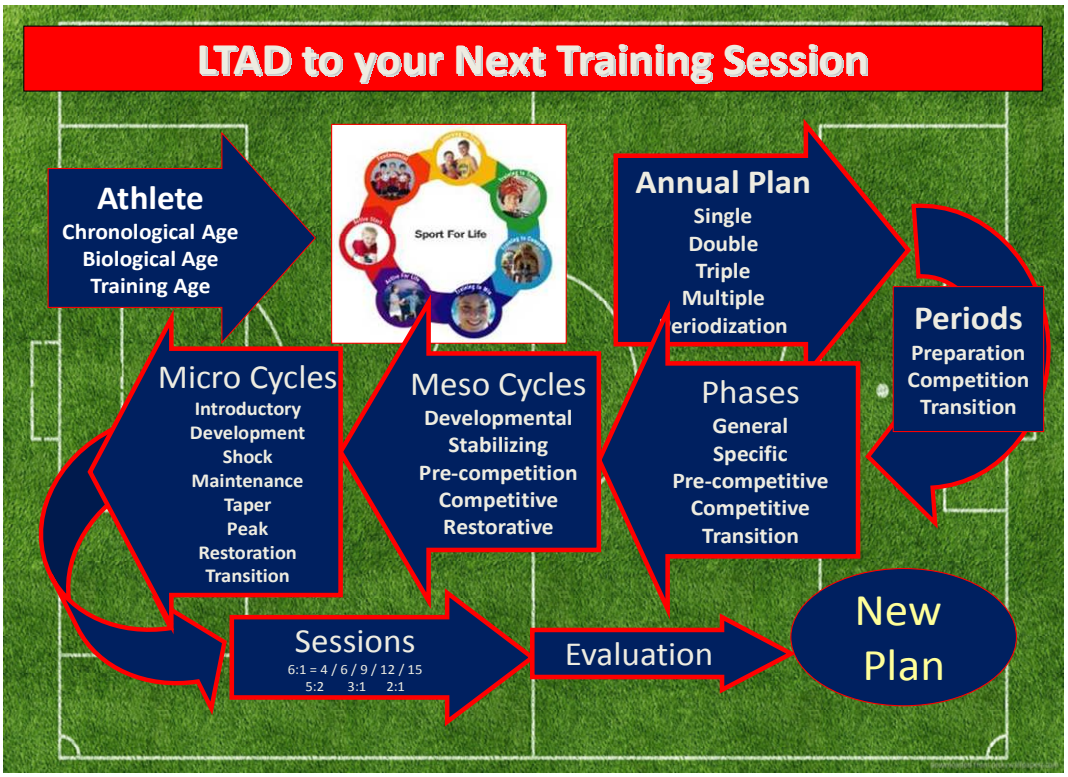

Chart 3. Planning flow of soccer training model in youth athlete based on the LTAD

Conclusion And Suggestion

The results showed that the model of soccer training developed is feasible, based on the validation of expert materials of coaching seen from several aspects. Aspects of training content quality content with 72% eligibility level. Aspects of training content with 94% eligibility level. Feasibility aspects of the training with 66% feasibility level. Aspects of sport coaching concept with 60% eligibility level. While the feasibility assessment of soccer training experts based on the basic concept aspects of training with 72% eligibility level. Aspects of development stage of the training with 82% eligibility level. Quality aspects of training materials with 68% eligibility. Assessment of soccer coach for youth athlete eligibility based on training aspect with level of 69% eligibility. Aspects of training design with 65% eligibility level. Material aspect with 69% eligibility level. Overall assessment of training eligibility is 68% with "Good" category.

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Model of Physical Activity Based on Perceptual Motor to Develop Intelligence for Kindergarten Students

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Abstract
The research intends to produce model of physical activity based on perceptual motor to develop multiple intelligences for Kindergarten students. The procedure of this development research adopts Borg and Gall research and development procedures (1983: 775), which are originally 10 steps modified into 7 steps. These steps are: 1) collecting information in the field, 2) analysing the information collected, 3) developing the initial product/ draft, 4) validating and revising the initial product / draft, 5) conducting small group trial and revision, 6) conducting large group trial and revision, and 7) compiling the final product. The subjects of small group trial involve 10 Grade B Kindergarten students and large group trial 54 Grade B Kindergarten students. Instruments for collecting data use: interview guidelines and value scales. The data analysis techniques used are by descriptive quantitative analysis and qualitative analysis. The research result is a model of physical activity based on perceptual motor consisting of 8 (eight) games: 1) my personal-themed game, 2) my family-themed game, 3) my neighbourhood-themed game, 4) animal-themed game, 5) plant- themed game, 6) vehicle-themed game, 7) universe- themed game, and 8) my country- themed game.Keywords: Model, Physical Activity, Perceptual Motor, Intelligence

Introduction
The development of multiple intelligences in learners in kindergarten should get serious attention by teachers. Teachers are required to be able and willing to provide various stimulus to develop multiple intelligences for kindergarten students. The provision of stimulus should be based on the belief that each learner has various intelligences whose the development requires stimulation or appropriate stimulation. Multiple intelligences includes linguistic verbal intelligence, mathematical logical intelligence, spatial visual intelligence, musical intelligence, kinaesthetic intelligence, interpersonal intelligence, intrapersonal intelligence, naturalist intelligence, and existential intelligence. One form of stimulus that can develop multiple intelligences in kindergarten student can be done through physical activity in the form of playing. The opinion by Tadkiroatun Musfiroh (2008: 42-43) explains that through playing student can develop all parts of the brain in children, which include: the reptile brain (brain stem), the limbic system, and the neocortex (mammalian brain). In kindergarten children (4-6 years), the reptilian brain and mammalian brain develop about 80%, indicating that at that moment the child's intelligence is open. In addition, it is explained that through the activity of playing, they can be able to move ideas, solve problems, and bring happiness.In accordance with the Kindergarten curriculum, physical activity is the scope of physical, sports and health learning programs. In the learner in kindergarten, the form of physical activity that contains the perceptual elements of motor and delivered in the form of playing is very important. This is based on the findings of several research results, among others: 1) the results of the research indicate that the ability of the perceptual motor has a relationship with the academic ability of the children, (Pravias Nourbakhsh, 2006: 40), 2) the research results show that the physical education program containing the perceptual motor elements can improve academic achievement in math, reading, and writing exams (Gonzales, Coretes, and Dobbins (2003) in Pravias Nourbakhsh, 2006: 41), 3) the research results conducted by Rajni Dhingra, *et al* (2010: 143) says that visual, auditory and kinesthetic perceptions of 4-6 year-olds have correlation with academic achievement in reading, spelling and math, 4) research results from Seyed Sajad Hosseini *et. al* (2011: 764) suggests that physical activity programmed within preschool period has an impact in the children's cognitive skills, 5) research results of Jose Morales, *et.al* (2011:

410) claims that perceptual motor performance is associated with academic achievement, children with good perceptual motor also have good cognitive, 6) Vannier and Gallahue in Hari Amirullah Rachman (2011: 14) states that perceptual motor can be developed optimally when children aged 2-6 years and at this age, it is golden age to lay the basic skills, and 7) Johnstone and Molly Ramon (2011: V) state that the age of 3-6 years is the optimal age for developing perceptual motor.

Perceptual motor-based physical activity allows sensory information to be gained and understood by appropriate reactions. Perceptual motor requires students to engage their brains and bodies in motion. Furthermore Jill A. Johnstone and Molly Ramon (2011: V) state that in perceptual motor conducted by children, will involve the brain and body to complete the task of motion together. Perceptual motor is different from ordinary motion activity, because perceptual motor contains perceptual components. According to Gallahue and Ozmun, (2002: 263) perceptual motor component consists of: body awareness, spatial awareness, directional awareness, and temporal awareness. Perceptual motor, essentially, is the individual's ability to accept, interpret and react appropriately to the number of stimulus that come to him/ her, not only from outside but from inside. Perceptual motor is often also described as the correlation between motion and perception. Perception is the process of receiving, selecting, and understanding information or stimulus from the outside. Perception produces awareness of what is happening outside our bodies and is our ability to receive information through sensing. Perceptual motor refers primarily to activities undertaken with the intent of improving cognitive and academic ability. Gallahue and Ozmun (2002: 266) suggest that increased perceptual motor ability plays an important role in the development and improvement of motion abilities of children. Therefore, to achieve a successful performance of good motion ability, it is important to improve the perceptual motor ability from early age. In accordance with kindergarten curriculum, it shows that perceptual motor has not been specified in the curriculum, either independently or integrated in the field of physical / motor.

In addition, based on preliminary study conducted in several kindergartens in Jogonalan District of Klaten Regency related to physical / motor learning, it is obtained information as follows: 1) in the physical / motor learning in kindergarten, the teacher conveys the material according to the existing curriculum, but there is some undelivered material. This is due to the limitations of media and facilities, 2) lack of development of physical / motor material based on perceptual motor in kindergarten, 3) lack of kindergarten teacher with physical education and sport background, thus allowing the barriers in the development and delivery of physical and motor materials, and 4) no perceptual motor test conducted on kindergarten students. The right solution is needed to overcome the problems mentioned above. One solution that can be done is to develop model of physical activity in the form of perceptual motor-based playing to develop multiple intelligences for kindergarten students.

Methodology

This development research procedure adopted Borg and Gall (1983: 775) research and development procedures, which were originally 10 steps modified into 7 steps. These steps were: 1) gathering information in the field, 2) analysing the collected information, 3) developing the initial product / draft, 4) validating and revising the initial product / draft, 5) conducting small group trial and revision, 6) conducting large group trials and revisions, and 7) compiling the final product. The subjects of small group trial employed 10 students of TK (Kindergarten) Pertiwi Plawikan and the subjects of large group trial employed 54 students, with details: TK Pertiwi Karangdukuh 13 students, TK Pertiwi Sumyang 10 students, TK ABA Plawikan 10 students, and TK ABA Ngering 21 students. The instruments for collecting the data used: interview guidelines and value scales. The data analysis techniques used were by descriptive quantitative analysis and qualitative analysis.

Results and Discussion

The results of this research are a model of physical activity based on perceptual motor to develop multiple intelligence for Kindergarten students. To create this physical activity model, the researchers follow the procedures in research and development, i.e. initial product validation, small group trials, and large group trials. Before being piloted into the field, both small group trials and large group trials, the initial draft of physical activity model are validated by 2 material experts and 3 practitioners / kindergarten teachers. The validation of initial draft of physical activity model by material experts and practitioners is done with Content Validity Ratio (CVR) and Content Validity Index (CVI). CVR test results show the content validity of physical activity model based on perceptual motor is good or has high content validity, with CVR result in the range 0,600 - 1,000 that is above 0,30. Meanwhile, the CVI test results have high level of validity, as in the table below:

Table 1. Results of CVI Test of Initial Draft of Physical Activity Model Based on Perceptual Motor.

No	Name of Game	CVI
1.	My personal-themed game	0,880
2.	My family-themed game	0,900
3.	My neighbourhood-themed game	0,880
4.	Animal-themed game	0,924
5.	Plant-themed game	0,905
6.	Vehicle-themed game	0,880
7.	Universe-themed game	0,900
8.	My country-themed game	0,900

Test of the reliability of physical activity model based on perceptual motor using Alpha Cronbach. Reliability test result is below:

Table 2. Results of Reliability Test of Initial Draft of Physical Activity Model Based on Perceptual Motor.

No	Name of Game	Correlation Coefficient	Explanation/ Status
1.	My personal-themed game	0,908	Reliabel
2.	My family-themed game	0,894	Reliabel
3.	My neighbourhood-themed game	0,894	Reliabel
4.	Animal-themed game	0,951	Reliabel
5.	Plant-themed game	0,925	Reliabel
6.	Vehicle-themed game	0,894	Reliabel
7.	Universe-themed game	0,914	Reliabel
8.	My country-themed game	0,914	Reliabel

The results of the implementation of physical activity model based on perceptual motor in small and large group trial as follows:

Table 3. Implementation Test Results of Physical Activity Model on Small Group Trials.

No	**Name of Game**	**Test Place of Kindergarten**
		Pertiwi Plawikan
1.	My personal-themed game	3.7
2.	My family-themed game	3.8
3.	My neighbourhood-themed game	3.8
4.	Animal-themed game	3.8
5.	Plant-themed game	3.8
6.	Vehicle-themed game	3.8
7.	Universe-themed game	3.9
8.	My country-themed game	3.8
Mean		3.8

Tabel 4. Implementation Test Results of Physical Activity Model on Large Group Trials.

No	**Name of Game**	**Test Place of Kindergarten**			
		Pertiwi Karangdukuh	**Pertiwi Sumyang**	**ABA Plawikan**	**ABA Ngering**
1.	My personal-themed game	3.9	3.9	3.9	3.9
2.	My family-themed game	3.9	3.9	3.9	3.9
3.	My neighbourhood-themed game	3.9	3.9	3.9	3.9
4.	Animal-themed game	3.9	3.9	3.9	3.9
5.	Plant-themed game	3.9	3.9	3.9	3.9

6.	Vehicle-themed game	3.9	3.9	3.9	3.9
7.	Universe-themed game	3.9	3.9	3.9	3.9
8.	My country-themed game	3.9	3.9	3.9	3.9
Mean		3.9	3.9	3.9	3.9

The scale of implementation assessment of the physical activity model based on perceptual motor consists of 4 (four) scales: scale 1 (very less good / very less acceptable), scale 2 (less good / less acceptable), scale 3 (good / acceptable) and scale 4 (very good / be accepted). The average test result of the implementation of physical activity model based on perceptual motor in small scale test 3.8 and large scale test 3.9. These results indicate that the physical activity model based on perceptual motor is in good category or accepted. The results of the study present physical activity model based on perceptual motor to develop multiple intellegences for Kindergarten students, covering 8 theme-based games. The advantages of this research are:

1. Development of Basic Elements of Motion in the Physical Activity Model Based on Perceptual Motor.

The developed perceptual motor based physical activity model contains some basic fundamental motions. Locomotor motion is a movement that requires the movement of places, moving from one place to another. For examples: walking, running, jumping, leaping, and bouncing. Non locomotor movement does not require movement of place, for example: spinning and swirling. Meanwhile, manipulative movement is a movement to play a certain object by using one of body part. For example: throwing and catching the ball, bouncing ball, and kicking the ball

2. Multiple Intelligence in the Physical Activity Model Based on Perceptual Motor

Physical activity model based on perceptual motor developed in addition to functioning to develop physical motor also stimulate various types of intelligence. Intelligence honed in the physical activity model based on perceptual motor is linguistic verbal intelligence, logical mathematical intelligence, spatial visual intelligence, musical intelligence, kinaesthetic intelligence, interpersonal intelligence, existential intelligence, and naturalist intelligence.

3. Ease of Physical Activity Model Based on Perceptual Motor for Kindergarten Students

Physical activity model based on perceptual motor developed can be applied by adjusting to the stage of children development achievement. The movements in the Physical activity model based on perceptual motor are generally not difficult to perform. Instead the children are enthusiasm and challenged to do it. In addition, the equipments used presented or painted colourful to make children interested to try them.

Conclusion

Physical activity model based on perceptual motor can be recommended to apply in Kindergarten (5-6 years) students. Physical activity model based on perceptual motor consists of 8 (eight) games: 1) self-personal- themed game, 2) my family-themed games, 3) my neighborhood-themed games, 4) animal-themed games, 5) plant- themed games, 6) vehicles- themed game, 7) universe- themed game, and 8) my country- themed game. Physical activity model based on perceptual motor developed in addition to functioning to improve physical motor also stimulating various types of intelligence.

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21st Century Mental Problems And Yoga

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Abstract: The 21st century is viewed from the perspective of development. In every field. One notices the emergence of Indian power and its discussions. The changing scenario in the society and the governmental sectors pertaining to self-confidence and health issues speaks of the relevance of the saying "Old is gold" as 'human safety' is viewed from the physical point of view but the physical health and the mental health are under viewed. This results in innumerable incidents of suicides among the youth and especially the personnel of the defense forces. This is a major challenge to the safety of the nation and its development. Yoga is one of the major redressal measures in this direction.However, if the concept of yoga and its transmission is done property, surely it will have far reaching effects in terms of nation building and safety.**Key words:** Development of India-health-morals-youth-defense personnel-yoga.

Introduction:

We have been passing through the age liberalization, privatization and globalization. The whole world become a global village and the development has assumed a prime direction but human existence is transformed into a mere mechanical existence. This has got a tremendous impact on the mental health of the people, quite often prompting them to commit suicides; Yoga is a powerful tool to overcome metal stress and duress besides instilling confidence to overcome metal stress and duress besides instilling confidence.

History of Yoga:

Yoga is a legacy of our forefathers. It was there in ancient India founded by a sage, Patanjali. Yoga was originated from the Sankrit word 'Yoj' which mean unification, concentration, confluence etc.

Definition of Yoga:

Yoga is a process in which body, mind, and soul get unified.
It controls the mind, heart, feelings, and determination.
It facilitates the communion with God.
It is the union of soul and Power.

Purpose of Study:

Nation building and Nation protection have been the prime concerns of these days. In the light of this, the issues like physical and mental healthcare spiritual strength have gained importance and obviously 'yoga' is the only panacea.

Methodology:

The primary and the secondary sources have been used for this research paper. News channels, internet and the news papers are also used for analysis. The students of the Military Ethology of Sri Shivaji Vidyalay and the citizens are also interviewed.

Results:

The personnel of the Indian Armed forces resorted to suiceds as the resultant of lack of inner strength, confidence and main cause was fruistration because of tension and duress.

Table 1 showing the suicides of the personnel of Indian Armed forces under duress resorted to suicides as the resultant lack of inner strength, confidence and main cause was frustration because tension and duress.

Table 1 showing the suicides of the personnel of Indian Armed forces under duress.

Year	No. of Suicides of Indian armed personnel
2003	96
2004	100
2005	129
2006	118
2007	123
2009	96
2010	115
2011	182
2012 (upto July)	69

Source: The Tribune, Chandigarh, 20 Aug, 2012.

There are many internal as well as external reasons. It is very obvious that even the Indian Army is not free from mental duress. Even the Maharashtra Police are not an exception to this. In 2014, there were 147 deaths of Maharashtra Police. Of this 41% died of cardiac arrest and 59% died of different reasons while 3 committed suicide. Obviously, the work duress resulted in the deaths of police personnel. Even the ordinary citizens and the students who aspire for better positions and marks may get frustrated when they fail to achieve their goals and commit suicide. The mental balance is the need of the hour and the right option is YOGA.

Discussion:

The right option is Yoga on the following counts:

Human life has become mechanical. Yoga is needed for mental balance every day.

The correct results of the solution is possible with Yoga process.Yoga is a simple and natural process.Expectation of going away from cannabis is possible with Yoga.

The development of body and mind is possible with Yoga.Yoga will enchance the mental morale.

Yoga Methods:

Pranaayaam,Padmasan,Sukhasan,Umanpad aasan,Pavanmukth aasan,Bhujang aasan,Shalabh aasan Shavaasan,Suryanamaskaar,Dhunarasan,SiddhaasanFor mental disorders, the following yogaasanas are useful.Hatayog,Halasan, Dharan

Conclusion:

In 21st century, nation building is based on the work efficiency of its citizens. The rising comforts, internal as well as external problems are posing a great threat to the mental health of the individuals, youth and the personnel of the armed services. The human mind needs to controlled and balanced. The mental health and mental balance of the people are very important factors for the wellbeing, of the society. The TV and electronic media have not achieved the desired results in this direction. Hence, the publicity of yoga nad its impact is very essential. Discussions are needed for convincing the opposition from the Muslim society. Then only the development may be possible from Indian perspective. Indians should be free from mental stress and duress. This is accomplished only through adoption and practicing of YOGA.

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Physical Fitness Profile of West Bengal & Jharkhand Handball Players

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Abstract

There are records of handball like games in the European Country in middle ages. The team handball game of today was formed by the end of the nineteenth century in the northern Europe. In the Asian countries, also in India Handball was spreaded very recently. In this study the total Handball players (N-46) were divided into two groups: Under 19 years (N-18) and above 19 years (N-28). For preparing the physical fitness profile following variables:1. Physiological ;(Height, Weight, BMI, Resting heart rate, Blood pressure, Sub maximal heart rate, aerobic capacity-VO_2 (max), anaerobic capacity); 2. Physical fitness: (grip strength, explosive strength, speed, endurance, agility, flexibility, balance, co-ordination); 3. Skill(speed with ball, throwing distance, zig zag run with ball, bouncing with ball, jump shot, lob shot, side shot). For analyzing the data Mean, SD, SE, F-test was calculated. Even the Asian countries Handball related data were very rare. So the present researcher formulated the present form of research topic for the benefit and improvement of Indian Handball scenario in the International arena.

Key words: Handball, Psychological, Physiological, throwing velocity, fitness.

Introduction:

Handball is a team sports in which two teams of seven players played with a ball and to throw it into the goal of other team. Handball players are typically referred to by the position they are playing. In modern handball there are four positions: Goalkeeper, Back, Pivot and wing. Right now handball is very popular game all over the world. One hundred and seventy countries are the members of International Handball Federation(IHF) and in Asia at least fifty four countries are the member of Asian Handball Federation. In 1972, India formed Handball Federation of India (HFI). Most of the Indian states are the member of Indian Handball Federation. The game Handball is slowly progressing in West Bengal.Handball is a small area game with low equipment cost. This game is enjoyable to the senior and the children also. It can be used as a competitive game and as a recreative game in all levels and genders. In handball India is in very low rank in the world. To develop the honour and ranking of our country the profile of Indian national players should be prepare. Then the result should be compared with the international team.It is identified that there are some studies in the Asian level and many studies in the other continental level. Manchado et al (2013) reviewed performance factors in women's team handball. Some studies analyzed basic and specific motor tasks of Handball players with their age difference (Visnupuu and Jurimae, 2009).

Objectives: 1.To collect Indian Handball players physical fitness data.

2. To compare it with international standard.

Method:

In this study the researcher collected data of Handball players from the eastern part of India. As per the convenience the researcher selected two leading Handball playing state (West Bengal and Jharkhand) from this eastern region. Total forty six willing and motivated Handball players' data were collected for this study. The age range was 16-28 yrs.

The data was analyzed according to age group. For preparing the physical fitness profile following variables:1. Physiological ;(Height, Weight, BMI, Resting heart rate, Blood pressure, Sub maximal heart rate, aerobic capacity-VO_2 (max), anaerobic capacity); 2. Physical fitness: (grip strength, explosive strength, speed, endurance, agility, flexibility, balance, co-ordination); 3. Skill(speed with ball, throwing

distance, zig zag run with ball, bouncing with ball, jump shot, lob shot, side shot). For analyzing the data Mean, SD, SE, F-test was calculated.

Result: The detail report (numerical data) of this study is presented according to their age differences. In this study the total Handball players (N-46) were divided into two groups: Under 19 years (N-18) and above 19 years (N-28). The report according to the age group of handball players presented in the chart.

Under 19 & above 19 years

Component	Groups	Mean	SD	t-value
Height(mts)	U-19	1.64	0.09	0.275
	A-19	1.64	0.09	
Weight(kg)	U-19	56.50	7.36	0.324
	A-19	55.83	6.32	
BMI Kg/(mts)^2	U-19	20.84	2.58	0.024
	A-19	20.83	2.46	
Resting Heart Rate(HR)	U-19	75.05	14.21	0.367
	A-19	73.68	10.98	
Systolic Blood Pressure(mm Hg)	U-19	116.33	11.29	0.723
	A-19	114.14	9.14	
Diastolic Blood Pressure(mmHg)	U-19	67.88	6.03	0.306
	A-19	67.17	8.55	
Sub-Maximal Heart Rate(beat/min)	U-19	132.33	15.41	.005
	A-19	132.35	18.14	
VO_2 Max (ml/kg/min)	U-19	55.75	6.47	0.012
	A-19	55.77	7.57	
300 mts Shuttle Run (min)	U-19	1.15	0.10	0.763
	A-19	1.17	0.08	
Strength (Right Hand Grip) kg	U-19	42.55	6.33	0.247
	A-19	42.12	5.45	
Strength (Left Hand Grip) kg	U-19	41.94	7.97	0.494
	A-19	40.98	5.16	
Leg Power(Standing Broad Jump) mts	U-19	2.11	0.15	0.134
	A-19	2.11	0.16	
50 Yard Dash (sec)	U-19	7.29	0.67	1.627
	A-19	7.63	0.67	
Copper Test (mts)	U-19	1749.94	391.01	1.861
	A-19	1992.14	459.56	
4×10m Shuttle Run (sec)	U-19	10.18	0.71	1.060
	A-19	10.40	0.64	
Johnson Box(cm)	U-19	12.77	1.47	0.233
	A-19	12.63	2.12	
T-Balance(Right Leg) sec	U-19	3.73	1.95	0.490
	A-19	1.03	2.05	
T-Balance(Left Leg) sec	U-19	3.74	1.42	0.672
	A-19	3.42	1.71	
Ball Transfer(sec)	U-19	29.23	5.52	1.887
	A-19	33.13	7.54	
Speed with Ball (sec)	U-19	6.42	0.63	0.892
	A-19	6.59	0.62	
Right Hand Throwing Distance (mts)	U-19	26.62	6.33	0.550
	A-19	27.63	5.94	
Left Hand Throwing Distance (mts)	U-19	17.92	5.98	0.428
	A-19	17.07	6.97	
Zig Zag Run with Ball (sec)	U-19	6.87	0.54	0.234
	A-19	6.91	0.52	

Bouncing with ball (sec)	U-19	8.61	1.45	0.396
	A-19	8.82	1.98	
Jump Shot (number)	U-19	2.55	1.29	1.657
	A-19	1.89	1.34	
Lob Shot (number)	U-19	2.22	1.55	1.571
	A-19	1.64	0.95	
Side Shot (number)	U-19	1.27	1.12	0.423
	A-19	1.11	1.44	

Discussion:

Researcher subdivided age as under 19 years (U-19) (N=18) and above 19 years (A-19) (N=28). It was found that there is no significant difference in any of the variables within these two groups. It means the performance character of under 19 and above 19 yrs were very much similar. This report provide a vital information to the handball professionals that there might be lack of training in the above 19 yrs handball players and that probably effect the performance level in the National and International handball competition. It is an alarming signal for Indian handball players.Visnapuu and Jarimae (2009) investigated anthropometric variables with basic and specific motor tests for 133 male Handball players. In their study, they divided Estoion boys into 4(four) age groups:

Conclusion:

in India there is a high possibility to spread this game each and every part of this country because it is a very interesting game. Students, parents, senior citizen in both genders can play it as a recreation game as well as in competitive nature. However in India there are lack of facilities; infrastructure and proper guidance. From this study it was revealed that due to the above causes the present researcher may not find remarkable differences between the under and above 19 yrs. group; Elite and Non Elite groups and among the different positional players in handball. After completing this study the present researcher strongly recommend for proper scientific training, motivational incentives, regular competitive and friendly matches and professional organizational set up for the further development of handball in India.

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Perceptions Of Pre-Service B.Ed Teacher Trainees On Human Rights

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Introduction

Education is the instrument to address inequalities by promoting equality, social justice and respect for the individual human being. These are preconditions for ensuring rights. The 1986 educational policy of India suggests various measures to bring equality through the system of education. A whole chapter of the 1986 National Policy on Education (NPE) spells out measures to promote equality of educational opportunity. NPE 1986 recommends the redesigning of the curriculum, textbooks, training of teachers and administrators to remove gender bias from textbooks and bring change in the status of women and educational development of the SC/ST population at all stages and levels of education. The Curriculum Framework of 2000 reiterated the view that education is an important instrument to fight inequality and to respond to the social, cultural, emotional and economic needs of students. The National Curriculum Framework 2005 (NCF) provides opportunities to promote respect for the child as an individual, social justice, equality, tolerance etc. In fact, "commitment to democracy and values of equality, justice, freedom, concern for other's well-being, secularism, respect for human dignity and rights" has been identified as the foremost goals of education. NCF (2005) expects the school curriculums to provide "adequate experience and space for dialogue and discourse in the school to build such a commitment in children".

Therefore issues and values addressing human rights should be integrated across the entire school activities, classroom environment, school management, teacher-pupil relationship, and teaching-learning process, etc. Teachers should continue to occupy the central role in the whole teaching-learning process in the context of generating human rights awareness among students.Framework of Teacher Education Curriculum developed by the National Council of Teacher Education (NCTE) is anchored firmly on the view that the teachers themselves should internalize the values of justice, liberty, equality and secularism so that they can interpret them effectively to the students. It strongly believes that the education of teachers should equip them with competencies needed to deal with discrimination, disparities, inequalities, etc. Consequently, it spells out certain competencies, commitments, and performance areas for the teachers to achieve that help them develop a humanistic perspective that is necessary in promoting consciousness towards human rights and their practice inside classroom.

Thus teacher education curriculums in India suggests that Indian teachers are expected to be well-equipped with the 3As (*Awareness, Analysis and Action*) of human rights once they come out of teacher education institutions and have the necessary skills to identify and translate into action the values and concerns related to human rights .But are they actually aware of the human rights issues and equipped to practice human rights in classroom situations? The growing incidence of violation of the rights of children by the teachers themselves in the form of caste/class/religion-based discrimination, corporal punishment and even violation of the modesty of children, etc. is a cause of serious concern for all education officials and calls for some urgent remedial measures. Study has been conducted to ascertain the basic awareness level of teacher trainees about human rights, who are supposed to practice them inside their classrooms. This study is an attempt at measuring the awareness of teacher trainees of various issues and concepts related to human rights.

Human Rights

Human rights, the most fundamental of all rights, are the rights people have simply because they are people. These rights belong to each person; man, women and child. They are the rights to life, liberty including all the political, civil, social, economic and cultural rights necessary for people to live dignified lives. Without human rights, people cannot live as human beings. Human rights are those requirements that allow us to develop to fullest extent and satisfy our basic human needs. They are ideals based on humanity's increasing and persistent demand for dignity, respect, justice, protection and freedom for decent human existence. The essential elements of all human rights affect the daily lives of each individual. They are to be enjoyed by all without discrimination with regard to race, gender, language, religion, political, social or national origin, property, birth or other status. In other words, it does not matter what color a person is, or what country a person belongs to, or what religion he or she believes in. all of them share the same human rights. As human rights belong to all of us to protect the human rights. Human rights are about caring for other people in the same way that we could wish them to care for us. Each individual needs to be treated as special and unique. Human rights are for everybody, even those people you disagree with or whom you actually dislike.

The global human rights struggle include the following; recognition of the equality and dignity of all individuals, recognition of cultural diversity as a fundamental human values, recognition and guarantee of fundamental equality of all person in human rights without discrimination with regard to race, creed, colour, nationality, ancestry, language, gender, place of origin or other status.

As the Universal Declaration of Human Rights days "all members of the human family are created free and equal in dignity." These human rights are often divided into different groups:

1.Fundamental freedom : these are the rights to freedom of speech, religion and assembly.

2.Legal rights: these are rights to freedom from arbitrary arrest, unreasonable search or seizure of property, arbitrary imprisonment, self-incrimination and unfair adjudication.

3.Equalitarian rights: these are the rights to equality and to access to employment, education, housing, and service without discrimination on the basis of race, religion, sex or other irrelevant characteristics.

4.Economic rights: these are the rights to everyone to an adequate standard of living by having adequate food, clothing, and housing, including the right to gain a living by working, the rights to own property, and right to contract with others.

Human Rights Education

Every woman, man, youth and child has the human right to education, training and information, and to other fundamental human rights dependent upon realization of the human right to education. The human right of all persons to education is explicitly set out in the Universal Declaration of Human Rights, the International Covenants, the Convention on the Rights of the Child and other widely adhered to international human rights treaties and Declarations —powerful tools that must be put to use in realizing the human right to education for all! Human Rights education can be defined as education, training and information aimed at building a universal culture of human rights. A comprehensive education in human rights not only provides knowledge about human rights and the mechanisms that protect them, but also imparts the skills needed to promote, defend and apply human rights in daily life. Human rights education fosters the attitudes and behaviors needed to uphold human rights for all members of the society.

Teacher and Human Rights Education

As indicated earlier, the Indian education system relies heavily on its teachers who are central to the process of teaching and learning. The country has more than five million teachers working at different levels of school education and an equally huge network of teacher education institutions to meet the needs of teacher preparation for the country. The Curriculum Framework prescribed for various teacher preparation programs of the country promotes the inclusion of themes related to various human rights that the teachers are expected to integrate at the school level. Teacher Education (NCTE) focuses on the view that the teachers themselves should internalize the values of justice, liberty, equality and secularism so that they can interpret them effectively to the students. It strongly believes that the education of teachers should equip them with competencies needed to deal with discrimination, disparities, inequalities. Consequently, it spells out certain competencies, commitments, and performance areas for the teachers to achieve that help them develop a humanistic perspective that is necessary in promoting consciousness towards human rights and their practice inside classroom. The vision of teacher education under the NCF (2005) is that the Teacher education programs prepare the teachers for the role of being an "encouraging, supportive and humane facilitator in teaching-learning situations to enable

learners to discover their talents, realize their physical and intellectual potentialities to the fullest, and to develop character and desirable social and human values to function as responsible citizens." As the result of the global challenges and the pressures on teacher education programs to prepare teachers to meet these challenges, a more focused attempt in recent past has been made to incorporate issues like human rights, peace education, international education, India's role in non-aligned movement, regional cooperation, South Asian Association for Regional Cooperation (SAARC), nuclear arms race, disarmament, emerging international economic order, globalization, environmental pollution and conservation and sustainable development, etc. in pre-service teacher education curriculums. These issues now find place in almost all teacher education programs at the primary and secondary levels as well as in the Master in Education courses.

Significance of the study

Education is widely acknowledged and seen as a way to empower people to improve their quality of life and increase their capacity to participate in the decision making process, leading to desired transformation in the social, cultural and economic policies. The human development index reveals the prosperity of a nation in terms not only of per capita income, in other words of economic growth, but also in the most vital areas like education, social, political and other development related areas. The genesis of development of a nation is gauged on the scale of education which leads to economic, social and other developments. Thus, higher the Educational development of a country more it leads to prosperity, more the prosperity better are people of the nation, and the betterment of the people needs to ranking of the nation in the world map.

Need of the study

Human rights need a central place in schooling and need to stay there for many more years to come; this entry and exit cannot be of the ad-hoc kind. Human rights are to be taught effectively and call for participatory teaching and learning which leads to the acquisition of human rights skills. Feelings are to be touched upon in the course of human rights education. In order to inculcate a broad comprehension of human rights as "human existence with dignity", the contents of human rights courses need to incorporate and reflect the concerns for democracy, development and peace.

Education consists of efforts to build a universal culture of human rights through the imparting of knowledge and skills modeling of attitude. Such education should direct towards strengthening respect for human rights and fundamental freedom promoting understanding, tolerance, gender equality and friendship among all nations.

Purpose of the study

The main purpose of the present investigation was to study the perception of pre-service teacher trainees on Human Rights.To promote a common understanding, culture of human rights education at regional and national level.

Objectives of the study

To study the perception of Human Rights among teacher trainees of government and private B.Ed colleges.To study the perception of Human Rights among male and female pre service Teacher Trainees.

Hypotheses

There exists a significant difference in the perception of Human Rights among private and government college teacher trainees.There exists a significant difference in the perception of Human Rights among male and female pre service Teacher trainees.

limitations of the study

The present study has some limitations as follows:

(1)The study was limited to only thirty B.ed students from each college.(2)The data was delimited to Hyderabad city.(3)The study was limited to two B.Ed colleges

(4)The time of research was limited.

Conclusion

This study is undertaken mainly to find out what proportion of the B.Ed. students possess awareness towards human rights. On the basis of the findings it is notice that only a negligible proportion of the sample exhibited high awareness towards human rights. At the same time none of the students have exhibited low human rights awareness. Keeping the findings of the study in view human rights education should be part of curriculum, textbooks, training and orientation. There is an urgent need to initiate action towards making students aware about human rights.

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To Improve Learning Environment In Elementary Education Through Yoga

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Abstract:
Development of complete integrated personality is the sole goal of education, which is possible through Yoga. Values are degrading and deteriorating in the present system of education. It is very essential to provide a clear understanding and Yoga to the teacher. Of tomorrow and its use as a great treasure for an individual and society at large. There is a need to provide a complete picture of Yoga by integrating in into school curriculum; the whole intention behind Yoga education is to being in self-discipline in an individual's life and a balanced disciplined generation of tomorrow. At present yoga education as an elective is being offered at the primary and secondary school level, which is prescribed under NCTE curriculum. According to Aurobindo, personality development implies an all-round development of personality at the physical, mental, intellectual, emotional and spiritual levels.**Key words:** Yoga, learning environment, Knowledge and wisdom, Elementary education.

Introduction:
Yoga is the greatest Indian concept annunciated to the world. Yoga one of the six systems of Indian philosophy and a part of the ancient Indian mysticism which was passed on from the master to the disciple as a sacred and secret wisdom in the hermitage, represents both the highest goal that man could achieve as well as the instrument through which it could be done. Conceived by the great sages in their quest for self-realization, it has come to be recognized, during its long travails from the hermitages to the cities, as the science of man, a philosophy of life, a code of conduct, an attitude and an approach, as well as an art of living which is capable not only of ensuring physical well-being, mental peace, harmony, moral elevation and spiritual uplift of man but also of transforming man from his gross animal existence to the sublime heights of divinity. There is no philosophy or religion which does not get permeated by the importance of yoga.Yoga constitutes one of the oldest and most important Scientific-Spiritual legacies of humanity and has been preached as well as practiced uninterruptedly since the dawn of human history. Derived from the Sanskrit root "Yuj" meaning 'to unite or integrate', yoga is generally understood as concerned with the union or integration of the following pairs.
Science and spiritualityKnowledge and wisdomIndividual consciousness and universal consciousness
Atman (Individual self) and Brahman (The all-pervading spirit)Man and God

Purpose of study:
To develop the hole personality in the children's by doing yoga practices like physically, socially, emotionally, intellectual and spiritually well being. Describe the yogic practices for improvement of cognitive aspects such as memory and concentration. Create good teaching and learning environment in elementary schools

Academic Achievement
The primary concern and the most important goal of education is academic achievement of pupils despite many varied statements about the aim of education. Student teaching and evaluation are the main important activities of educational institutions. The suitability and appropriativeness of the various methods of imparting knowledge to the students and the different modes of acquiring knowledge by them may be judged on the basis of the academic achievement of the students. The higher academic achievement tends to suggest that these methods and modes are suitable and appropriate where s the reverse is indicated by the lower academic achievement of the students. Evaluation of learning outcomes of the students via the measurement of their academic achievement has b n in the focus of attention of teachers, educational experts and planners for a pretty long time. Such as evaluation is the central task of the institutions imparting formal education to the student, generally termed as 'examination system'.

Personality development:

A good personality is sweet like honey. The quality of social and cognitive contributions mode by an individual is the Yardstick of his/her personality. Yoga is a methodical effort at self-perfection via the development of the potentialities latent in an individual. It is an expansion of the narrow, constricted, egoistic personality to an all pervasive, eternal, and blissful state of reality.

Personality Development At Physical Level

These aspects of personality development at physical level make the body work most efficiently by harnessing the energies of children's in the right direction. The body gets all the necessary strength to deal with the situation. It is in this area of application of Yoga that the specialists in physical culture, emotional, social relationships etc. are keenly interested and are putting Yoga to utmost use.

Personality development at emotional level:

The challenges of the create a great threat to the emotional faculty in children's. Yet the culturing of student's emotions-development of there emotional faculties finds no please in the whole scheme of education.

Personality Development at intellectual level:

The children are taught right from the primary level to think logically and scientifically. The capacity to analyze process and co-relate relevant information is the function of the intellect; concentration is the expression, precision is the outcome.

Personality Development at spiritual level:

Children's may have a amazing creative power, a powerful intellect and a highly sensitized emotional grasp, yet may have not an iota of spiritual orientation. they may be completely deprived of spirituality.

Yoga practices for concentration development:

Concentration has been defined as "the ability to direct one's thinking in whatever direction one would intend." We all have the ability to concentrate for a small time. But at other times our thoughts are scattered, and children's minds run from one thing to another

Yoga practices for memory development:

Memory is the capacity to retain and recall information about past and present incidents. Memory capacity is the ability to analyze and synthesize the assimilated information in children's. The power of memory varies among individual. Simply put, memory is the mental activity of recalling information that they have learned or experienced.

Results:

Yoga help to the children's to participate in school activities like learning the lessons.

They have improved their concentration; memory and will-power throw yoga.

They enhance the coordination between peer group members and increase communication among them.

Establish good manner and peace in the school.

Conclusion:

The yoga focuses on concept and teachings which are appropriate for elementary schoolchildren in the age groups 6-14years.Mainly, four basic elements of the childs personality viz. concentration, memory, good manner, peace have been discussed in the seminor.

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The Role of Sports Nutrition for Sports Persons

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Introduction:

Nutrition is the science that deals with food and its use by the body. We ,like all other living things, need food to live. food supplies the energy for every action we undertake from eating banana to running a race. Food also provides material that our body needs to build up and repair its tissues and to regulate the functions of its organs and systems. The chemicals in food, which our body needs, are called nutrients.

What is the sports nutrition: The field of sports nutrition requires a command of general nutrition and exercise science, an understanding of their interrelationship, and the knowledge of how to practically apply sports nutrition concepts. This text provides a review of the current sports nutrition research, established dietary recommendations for athletes, and guidance on how to develop individualized nutrition plans for athletes participating in various sports.

What are the basic nutrients: Food and beverages are composed of six nutrients that are vital to the human body for producing energy, contributing to the growth and development of tissues, regulating body processes and preventing deficiency and degenerative diseases. The six nutrients are classified as essential nutrients. They are carbohydrates, proteins, fats, vitamins, minerals and water. The body requires these nutrients to function properly however the body is unable to endogenously manufacture them in the quantities needed on a daily basis.

Carbohydrate: : Carbohydrates are stored in the body in a form of glycogen, which can be used during physical activity. Carbohydrate is necessary to meet the demands of energy needed during exercise, to maintain blood glucose level and replenish muscle glycogen store. During sub-maximal exercise, carbohydrates in the body are the major source of fuel. Sources of carbohydrate foods rich in carbohydrates are rice, wheat and other cereals all types of root crops.

Proteins: proteins are needed to build and maintain muscle, proteins can also be used to provide energy. Proteins are made from amino acids the primary building blocks of the body when proteins are eaten and digested they are broken down into their amino acids which are then absorbed and used to build new tissues. Protein is needed for nutrient transfer in the blood, connective tissue support and the repair of tissue in response to periods of exercise

Fat: fast are an essential part of a nutritious diet. They are a concentrated from of energy and are the form in which much of the energy reserve of animal and some seeds is stored fat are essential components of cell membranes and are needed for the absorption and use of some vitamins. Fats and oils provide more than twice the amount of food energy as carbohydrates and proteins.

Vitamins and minerals: vitamins and minerals are called micronutrients. They are needed in much smaller amounts than carbohydrate, protein and fat but essential for good nutrient. Some mineral also make up part of many of the body's tissues, for example calcium and fluoride are found in bones and teeth and iron is found in the blood. Vitamins are required in wide variety of bodily functions and operations which helps to sustain the body healthy and disease free. The function of minerals is for structural development of tissues as well as the regulation of bodily process

Water: the human body can survive for a long duration without any of the micro and macro nutrient but not without water. The body is made of 55-60% water, representing a nearly ubiquitous presence in bodily tissues and fluids. In athletes, water is important for temperature regulation, lubrication of joints and the transport of the nutrients to activate tissues. It regulates the body's temperature and protects vital organs, aids the digestive system, acts within each cell to transport nutrients and dispel waste

Calculation of energy availability:

Method: there are hundred nutrients in the food . These are mainly grouped into six classes namely carbohydrates, proteins, fats, nutrients, carbohydrates, proteins and fats supply us energy. Before understanding details of these we must know about measuring units of energy. The energy value of food is measured in heat units called calories is the amount of heat required to raise the temperature of 1 gram of water by 1 degree. A kilo calorie is equal to 1000 calories. A kilocalorie is written as calorie with capital C

Daily energy requirements

Personal energy requirement = Basic energy + extra energy

Basic energy requirements: for every kg of body weight 1.3 c of energy is required every hour. An athlete weight 50kg would require 1.3*24hr*50kg= 1560 calories/day

Extra energy requirements: for each hour of training you require 8.5 calories of energy for each kg of body weight. (for a two hour training session our 50kg athlete would require 8.5 * 2 hr * 50 kg= 850 calories

An athlete weighing 50 kg who trains for two hours would require an intake of approx 2410 calories

Basic energy + Extra energy = 1560+850= 2410 calories

Conclusion:

Diet is of great importance to athletes, the key to achieving an optimal sports diet in relationship to peak performance and good health is balance. Athletes must fuel their bodies with the appropriate nutritional foods to meet their energy requirements in competition, training and recovery. If these nutritional needs are not met, there is an increased risk of poor performance and health issues. The use of a nutritional supplement within established guidelines is safe, effective and ethical. Hundreds of studies have shown the effectiveness of creatine monohydrate supplementation in improving anaerobic capacity strength and lean body mass in conjunction with training, but still there is sports specific variation in the food fads and practices indicating the strong influence on coaches and peers. It is vital to educate the sportsmen about the dietary pattern. Failure to consume right diet during competition due to false belief in markets and constant fear of eating prohibited foods may hamper performance. Finally the future of nutritional supplement looks bright in regard to the areas of transport mechanism, improved muscle retention as well as treatment of numerous clinical maladies through supplementations

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Comparative Study On Management Challenges In Youth And Sport Offices Of Mekelle And Central Zones In Tigrai Regional State

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Abstract
The purpose of this study was to compare the management challenges such as lack of facilities, equipments and financein the youth and sport offices of Mekelle and Central Zones. Comparative survey specifically, Cross-sectional design was used to compare the youth and sport offices of Mekelle and Central zone. The researcher used simple random sampling technique to select ten Woreda and Sub city youth and sport offices from the -19- Woredas and Sub-cities of the two Zones. The researcher also used purposive sampling technique to select the whole population (108) of the selected Woreda youth and sport offices as a respondent. A total of -30- self made but standardized *5 liker test* questionnaire and 5 unstructured interview were used in order to collect concrete and relevant information about the above three variables. Pilot study was conducted to check the reliability of the questionnaires and the result of the test of reliability Alpha coefficient was 0.822, 0.764 and 0 .75 for facilities, equipments and financerespectively. Independent t-test was used to compare the facilities, equipments and financeamong the youth and sport offices of Mekelle and Central zone. The results obtained through independent t-testproved that, there were statistically significance differences among the youth and sport offices of Mekelle and Central Zones on their facilities, equipments and finance.Key words: *Facilities, Equipments, Finance, youth and sport offices.*

Introduction

The availability, adequacy and maintenance of facilities are necessary conditions for running a good and meaningful programme in sports and related fields. On this note, it suffices to say that though some fitness programmes can be organized with the minimum availability or total absence of facilities and equipment, their presence and adequacy will, however, contribute to the attainment of set goals and lend some degree of purpose to the overall programme. There are three major problems on sport establishment. First, the lack of money support, Second, the lack of the frequency of the competition joining by the athlete, and the third, lack of the adequate of sport facilities. Especially for the last problem, it needs a work from all of the counterparts and the community to open up their eyes and to take action in order to understand that the major problem of sport world now a day is the lack of the adequate sport facilities. Many sports facilities were not built for any specific sport. Today, especially at social and community levels of sport and recreation, many improvised and converted buildings or spaces are used, and they may be far from ideal in terms of safety. Therefore, in such cases, facility managers must ensure that the facility does not endanger players or spectators in any way. When there is no adequate sport facilities the sport managers may challenge to run the sport activities and to become successful in achieving their goals (Awosika, 1982).

Sport equipment represents the tools that the coaches and the participants must have or use to facilitate the coaching of sports and for competitions. If sports program are to achieve any success and for effective management, there must be availability of sports equipment and supplies in high quality and quantity. Equipping a player with cheap, poor, filthy equipment is no different from selling a gun without telling the buyer how to use it. The provision and maintenance of good and quality equipment will enhance and promote healthy sports competitions. Inadequate sports equipment may force the sports managers to regulate their sporting activities. Lack of sports equipment hinders the organization and management of sports Adequate computerized equipment are very essential in order to obtain optimum performance from the athletes in the Woreda when the athletes have

been psyched to believe in equipment and stressing that effort should be made to properly equip athletes in the country(Benson, 2012).

Sports consume a lot of money. Sport practices could not be classified as commercial ventures and in this regard, the funding of sport should be adequate and there should be no delay in the release of funds for the running of sports programme. The finances involved indifferent sports programmes are raised in various ways. Budgeting helps to identify the objectives of the sport organization, the resources available to carry out the objectives and it involves prepared costing of program in terms of estimated income and expenditure. Budget as a written estimate of anticipated income and expenditure should be clearly prepared document based on the financial information available (Ladani, 2008).

Methods

Design of the study

In this study the researcher usedcomparative research design specifically, cross sectional design i.e. the researcher investigated whether there was a significant difference among the youth and sport offices of Mekelle and Central zones on their management challenges such as lack of facilities, equipments and finance. In addition, the researcher was collected data from the selected respondents' one times using questionnaire and interview.

Selection of subjects

In this study, the researcher selected ten Woreda/Sub-city youth and sport offices from the total of-19-Woredas and Sub-cities i.e. five out of the seven youth and sport offices from Mekelle zone and five out of the twelve youth and sport offices from Central zone of Tigrai region by a method of simple random sampling technique. The researcher also used purposive sampling technique to select all the population (108) as respondents from the ten selected Woreda and Sub-city youth and sport offices of Mekelle and Central Zones. All of the samples were participated willingly and voluntarily in this study.

Selection of variables and instruments

Based on the researchers experience and knowledge gained from different sources, the three variables of management challenges such as lack of facilities, equipments and finance were considered as variables for the present study. In this study the researcher used *5 liker test* questionnaire and unstructured interview in order to collect concrete and relevant information about the above three variables.

Data Collection Procedure

The researcher obtained a letter of cooperation from Mekelle university sport science department to the respondents. All the participants of the study were asked for their willingness and informed about the purpose of the study before the questionnaire distributed. Setting arrangement was applied in order to avoid cheating and collect correct data from the respondents. The questionnaire was distributed in a face to face manner. Moreover, during the administration of the questionnaires further clarification was given wherever it was needed. The questionnaire was distributed and collected by the researcher after completion of them from expected respondents. In order to collect relevant information that helps the researcher to support/ triangulate the data that were collected by using questionnaire, the researcher was forwarded unstructured questions to the selected 10-experts then the interviewees were justified about the questions raised by the interviewer based on their feeling.

All the questionnaires were standardized through experts and experienced persons in management field including language professionals to assure their validity. After incorporating all the suggestions made by the experts and experienced persons in management and sport field including language professionals, the final questionnaire was prepared and subjected to further scrutiny by conducting a pilot study to ascertain its reliability. The two Woreda/Sub-city namely,Adihaki and T/maichow were selected randomly for the study. The data gathered for the pilot test were subjected to computer analysis using the statistical package for social sciences (SPSS version 20.0) to determine the reliability coefficient of the questionnaire and also to ascertain whether the questionnaire used was appropriate for the study. The result of the test of reliability showed that Cranach Alpha coefficient of each variables were 0.822, 0.764 and 0 .75 for facilities, equipments and financerespectively. Spiegal (1992), Stevens (1986) reported that, an instrument is considered reliable if it lies between0 and 1 and the closer the calculated reliability coefficient is to 0, the less reliable is the instrument, and the closer it is to 1, the more reliable is the instrument.

Statistical Techniques

The Statistical Package for the Social Sciences (SPSS; version 20.0) was used for the data analysis. It was chosen to use parametric statistical tools even though the data was primarily ordinal. This can be justified by the interval like character of the given data and the greater accuracy and powerfulness of the paramagnetic test is maintained (Doering and Hubbared, 1979). Independent t-test was used to compare the management challenges such as lack of facilities, equipments and finance among the youth and sport offices of Mekelle and Central zone.

The result was expressed by mean ±standard error of mean and also to show whether there was statistical significance difference among the various groups in the youth and sport offices of Mekelle and Central zone in Tigrai, the researcher used T-value. The level of significance was set at 0.05 levels of confidences.

Results

Table 1:Descriptive Statistics For The Presence Of Accessible And Quality Sport Facilities In Woreda Youth And Sports Of Mekelle And Central Zone

Zone of respondents	N	Mean	Std. Deviation	Std. Error Mean
Central Zone youth and sport offices	54	2.83	1.077	.147
Mekelle Zone youth and sport offices	54	2.31	1.025	.139

Table 1Shows that the central zone youth and sport offices mean ± standard error of mean about the presence of accessible and quality sport facilities was2.83±0.147and Mekelle Zone youth and sport offices mean ± standard error of mean was2.31± 0.139.From this we can understand as Central Zone had more sport facilities when compared with Mekelle zone. But to show whether the difference was significant or not the researcher used independent sample t-test.

Table 2:Independent Samples T-Test Comparison For The Presence Of Accessible And Quality Sport Facilities In Woreda Youth And Sports Of Mekelle And Central Zone

presence of accessible and quality sport facilities	Levine's Test for Equality of Variances	t-test for Equality of Means							
	F	Sig.	T	Df	Sig. (2-tailed)	MD	SEMD	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	8.181	.005	2.563	106	.012	.519	.202	.117	.920
Equal variances not assumed			2.563	105.7	.012	.519	.202	.117	.920

Significant at 0.05 level Confidence (1.96) Degree of freedom =106

The result of the independent sample test in the above table 2 shows that. There was statistical significant difference among the youth and sport offices of Mekelle and Central zone about the presence of accessible and quality sport facilities. Because the calculated"t"value of 2.563 was greater than the t-tabulated value of 1.96 with 106 degree of freedom; In addition the calculated F-ratio value of 8.181 was greater than 2.60, F-critical value. And also the calculated sig. (P) value of 0.012 was less than 0.05, level of significance.

The data gathered through interview showed that as there was lack of good quality and accessible sport facilities in the Woreda and sub cities of both Mekelle and Central Zone; since 100% of the interviewees in both youth and sport offices of Mekelle and Central Zone responded as there was no good quality and accessible sport facilities in their Woreda and sub-cities.

Figure 1graphical Presentation Of Mean Comparison On The Presence Of Accessible And Quality Sport Facilities Between The Youth And Sport Offices Of Mekelle And Central Zones

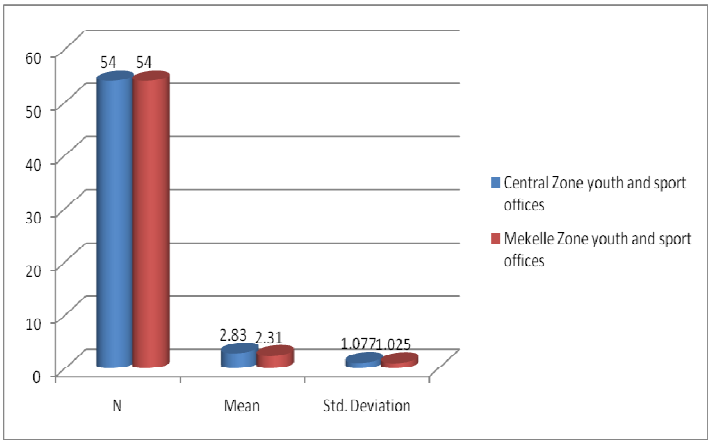


Table 3descriptive Statistics For The Presence Of Accessible And Quality Sport Equipments In Woreda Youth And Sports Of Mekelle And Central Zone

Zone of respondents	N	Mean	Std. Deviation	Std. Error Mean
Central Zone youth and sport offices	54	3.15	1.035	.141
Mekelle Zone youth and sport offices	54	2.70	1.127	.153

Table 3Shows that the central zone youth and sport offices mean ± standard error of mean about the presence of accessible and quality sport Equipments was 3.15± 0.141 and Mekelle Zone youth and sport offices mean ± standard error of mean was 2.70± 0.153. From this we can understand as Central Zone had more and good quality sport Equipments when compared with Mekelle zone. But to show whether the difference was significant or not the researcher used independent sample t-test.

Table 4independent Samples T-Test Comparison For The Presence Of Accessible And Quality Sport Equipments In Woreda Youth And Sports Of Mekelle And Central Zone

presence of accessible and quality sport Equipments	Levine's Test for Equality of Variances	t-test for Equality of Means							
	F	Sig.	T	Df	Sig. (2-tailed)	MD	SEMD	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.524	.471	2.135	106	.035	.444	.208	.032	.857
Equal variances not assumed			2.135	105.25	.035	.444	.208	.032	.857

Significant at 0.05 level Confidence (1.96) Degree of freedom =106

The result of the independent sample test in the above table 4 shows that as there wasstatistical significant difference among the youth and sport offices of Mekelle and Central zoneabout the presence of accessible and qualitysport Equipments. Because the calculated"t"value of2.135 was greater than the t-tabulated value of 1.96 with 106 degree of freedom; In addition the calculated sig. (P) value of 0.035 was less than 0.05, level of significance.

Based on the data collected using interview, 100% of the interviewees responded as there was lack of good quality and quantities of sport equipments in Mekelle zone. Whereas most of the interviewees (80%) in the youth and sport offices of Central Zone responded as there was no shortage of sport equipment but there was a problem on the qualities.

Figure 2graphical Presentation Of Mean Comparison On The Presence Of Accessible And Quality Sport Equipments Between The Youth And Sport Offices Of Mekelle And Central Zone

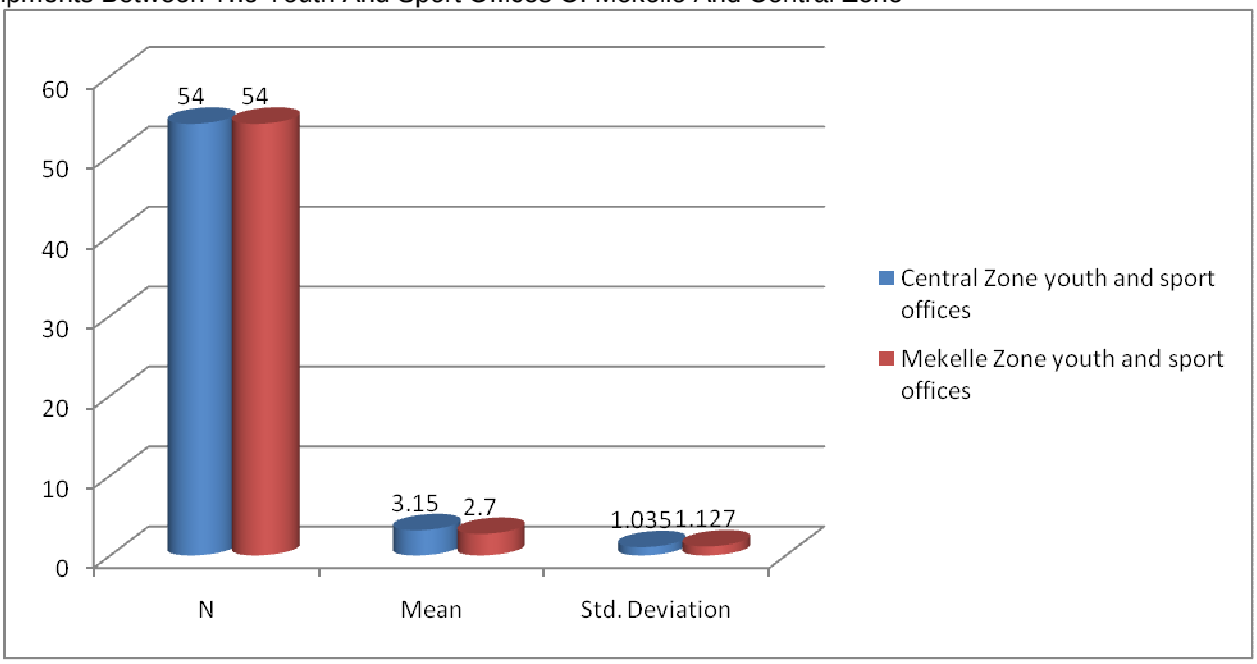


TABLE 5

DESCRIPTIVE STATISTICS FOR THE PRESENCE OF ADEQUATE SPORT FINANCE IN YOUTH AND SPORTS OFFICES OF MEKELLE AND CENTRAL ZONE

Zone of respondents	N	Mean	Std. Deviation	Std. Error Mean
Central Zone youth and sport offices	54	2.80	1.016	.138
Mekelle Zone youth and sport offices	54	2.43	.860	.117

Table5Showsthatthe Central zone youth and sport offices mean ± standard error of mean about the presence of adequate sport finance was2.80± 0.138 and Mekelle Zone youth and sport offices mean ± standard error of mean was2.43± 0.117.From this we can understand as Central Zone youth and sport offices had better sport finance when compared with Mekelle zone youth and sport offices. But to show whether the difference was significant or not the researcher used independent sample t-test.

Table 6:Independent Samples T-Test Comparison For The Presence Of Adequate Finance In The Youth And Sport Offices Of Mekelle And Central Zone

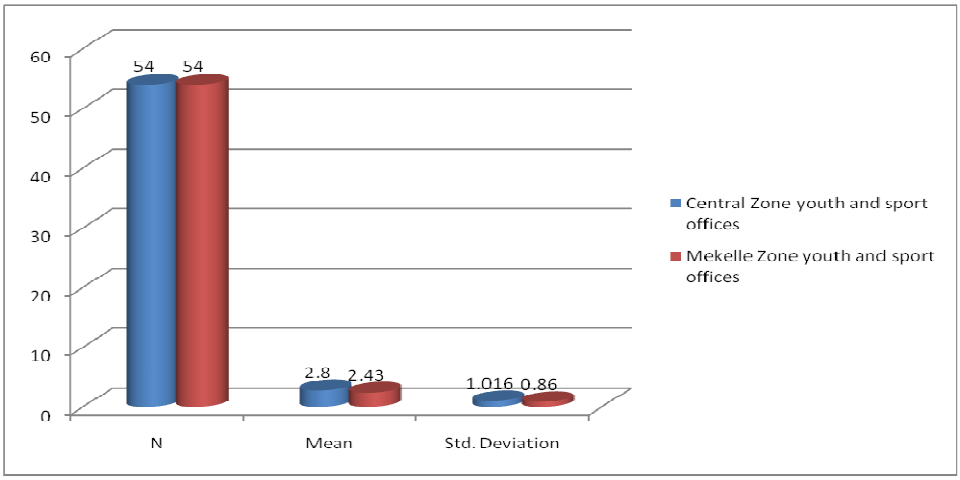
presence of adequate sport finance	Levine's Test for Equality of Variances	t-test for Equality of Means							
	F	Sig.	T	Df	Sig. (2-tailed)	MD	SEMD	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	13.082	.000	2.044	106	.043	.370	.181	.011	.730
Equal variances not assumed			2.044	103.17	.043	.370	.181	.011	.730

Significant at 0.05 level Confidence (1.96) Degree of freedom =106

The result of the independent sample test in the above table 6 shows a statistical significant difference among the youth and sport offices of Mekelle and Central zone about the presence of adequatefinance. Because the calculated"t"value of2.044 is greater than the t-tabulated value of 1.96 with 106 degree of freedom; In addition the calculated sig. (P) value of 0.043 is less than 0.05, level of significance.

The data gathered through interview showed that as there was shortage of financial budget in the youth and sport offices of both Mekelle and Central Zone; since 100% of the interviewees in both youth and sport offices of Mekelle and Central Zone responded as there was no adequate financial budget for sport activities; the local Community people didn't contribute fund for sports and the local government have being only funding for sport.

Figure 3graphical Presentation Of Mean Comparison On The Presence Of Adequate Sport Finance Between The Youth And Sport Offices Of Mekelle And Central Zone



Discussion

The purpose of this study was to compare the management challenges such as lack of facilities, equipments and financein the youth and sport offices of Mekelle and Central Zones. The independent t-test shows that as there was statistically significant difference among the youth and sport offices of Mekelle and Central zones in relation to the

presence of accessible and quality sport facilities since the calculated t- value was greater than the t- tabulated value. Central Zone showed significantly better result than Mekelle Zone in relation to their sport facilities. Based on the data gathered through interview, there was lack of good quality and accessible sport facilities in the Woreda and sub cities of both Mekelle and Central Zone; since 100% of the interviewees in both youth and sport offices of Mekelle and Central Zone responded as there was no good quality and accessible sport facilities in their Woreda and sub-cities.

The result and finding of this study was supported by Christopher*et al*., (2015) concluded that facilities/equipment is a predictor of sports development. The study revealed that the status of spots development was low due to inadequate facilities and also absence of good maintenance habits of the few facilities. The few availability facilities are not constantly maintained apart from few ones that were recently renovated by the government.

The independent t-test shows that as there was statistically significant difference among the youth and sport offices of Mekelle and Central zones in relation to the presence of accessible and quality sport equipments since the calculated t- value was greater than the t- tabulated value. Central Zone showed significantly better result than Mekelle Zone in relation to their sport equipments. Based on the data collected using interview, 100% of the interviewees responded as there was lack of good quality and quantities of sport equipments in Mekelle zone. Whereas most of the interviewees (80%) in the youth and sport offices of Central Zone responded as there was no shortage of sport equipment but there was a problem on the qualities.

The result andfinding of this study was supported byJacob (2014) concluded that, Identification of talented student-athletes in universities in Kenya was challenged by lack of necessary equipment to facilitate the process of talent identification.The independent t-test shows that as there was statistically significant difference among the youth and sport offices of Mekelle and Central zones in relation to the presence of adequate finance since the calculated t- value was greater than the t- tabulated value. Central Zone showed significantly better than Mekelle Zone in relation to their finance. The data gathered through interview showed that as there was shortage of financial budget in the youth and sport offices of both Mekelle and Central Zone; since 100% of the interviewees in both youth and sport offices of Mekelle and Central Zone responded as there was no adequate financial budget for sport activities; the local Community people didn't contribute fund for sports and the local government have being only funding for sport. The result and finding of the study was supported by Rikardsson H. and Rikardsson L., (2013) concluded that, financial budget is very important for the development of sport and it helps for the continuity of the clubs' participation in different tournaments

Conclusion

Based on the analysis of the data, interpretation of results and discussion of findings the following conclusions were made.The youth and sport offices of Central Zone have better facilities when compared to the youth and sport offices of Mekelle Zone.The youth and sport offices of Central Zone have better equipments when compared to the youth and sport offices of Mekelle Zone.The youth and sport offices of Central Zone have better financial budget when compared to the youth and sport offices of Mekelle Zone.

Recommendation:

Based on the above results and conclusions the researcher recommended that:

The youth and sport office administrators in Mekelle zone together with the local government should prepare good quality sport facilities/ equipments and provide proper maintenance.The athletes and coaches should use the facilities and equipments in a safe manner.The local government, the communities and different voluntary people together should provide fund for running sport activities in a well manner.

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Incongruence Of Gender, Leadership Roles And Underrepresentation Of Women In Sport Leadership Positions

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Abstract
Research has shown that women have gained access in top executive positions of leadership in different sectors of development, yet they still remain rare and underrepresented in the realm of sport. Over the years, sport management scholars have presented a number of explanations emphasizing the factors that impede women's ascend to top leadership positions and suggest strategies for change, yet the phenomenon still persists. Apparently, giving voices to the women who lived with the experiences and broke the ceiling of oppression in the male dominated environment have somehow been given less emphasis in the context of social science research. As such, the purpose of this study is to apply phenomenological research approach in order to seek an in-depth understanding of the underrepresentation of women in top leadership positions of sport organizations. Such approach specifically constitutes three qualitative methods which are interviews, observations and document analysis of which believed to provide profound and rich data. Subsequently, data will be gathered from a purposive maximum variation sampling of 19 women leaders who are in the top leadership positions of sport organizations in Malaysia. Furthermore, the study proposes a framework working toward the theoretical perspectives of role congruity, homologous reproduction and pipeline problem of which attribution associated to social, organizational and personal factors would be obtained to explain the underrepresentation of women in sport leadership positions. **KEYWORDS**: Underrepresentation, women in sport leadership, role congruity, homologous reproduction, pipeline problem

Introduction

In the social context, leadership is mostly a men's right and arena, such as, business, politics, armed forces, and other segment of society (Eagly & Karau, 2002), and this does not exclude the realm of sport. Where in women are less likely associated with leadership than men (Latu, Mast, Lammers, & Bombari, 2013). Women in leadership face number of unfair life disadvantages that reduces their capability to attain their full potential (Women Win Journal, 2009). Although women have gained more access to higher management positions, they still lag behind as elite leaders and top executives (Eagly & Karau, 2002). In many studies, despite formal guarantees of equality, the overall rate of progress for women particularly those from the poorest and marginalized regions of the world have been slow (Women Win Journal, 2009). Many barriers and challenges to equitable employment opportunities remain, including stereotypical attitudes towards women and sport. In addition, Women 2000 and Beyond Journal (2007) affirmed that given sport as traditionally a male domain, the involvement of women in sport challenges a multitude of gender stereotypes. Specifically, the globalization of women's movement of equity which started in developed and Western countries have reached many parts of the world, including the South East Asia, including Malaysia. Megat Daud, Radzi, Abdullah, and Johari (2013) exemplified that women in sport in top-level positions is still lacking in numbers in contrast to the population and lower in their male counterparts.

The issue of women's underrepresentation in sport leadership is a phenomenon that every sport woman advocate wanted to put forward in breaking the barriers in achieving opportunities and full potentials. The voices of women speaking about problems encountered in sport leadership will keep the issues of an underrepresented gender in the forefront of the society (Inglis, Danylchuk, & Pastore, 2000). There have been improvements in the number of women in sports as participants, officials and leaders. Such advancements include the increase of women athletes by 44% and women's participation in all sports for the first time in 2012 London Olympic (Factsheet London Facts and Figures, International Olympic Committee, 2012). The FIFA reform for the inclusion of women as decision makers in the executive committee (http://resources.fifa.com/mm/document/affederation/footballgovernance/02/72/23/75/201510fifareformsubmissionwfttffinal_neutral.pdf) was positively deliberated. Recently, the 2016 Rio Olympic Games mark the second straight Summer Olympics to make it women to all sports. Nonetheless, there is still a significant amount of work that needs to be done to create equity in women's representation in top leadership positions (Parnther, Deranek, & Michel, 2014) of sport organizations.

Theoretical rationale

The constructivist research paradigm will be used to seek out and understand the perspectives of the women sport leader participants' stories which are necessary for creating meaning in the social world where they dwell. While the three theoretical perspectives of role congruity, homologous reproduction and pipeline theories will be used to create a greater understanding of the lived experiences of the women sport leaders who are in a male dominated environment. The interplay of the three theoretical perspectives will be employed in the current study as it is believed to unearth greater explanation for women's underrepresentation in leadership positions in sport organizations.

Such theory, as role congruity (Eagly & Karau, 2002), hypothesizes that behavior is positively evaluated when it is aligned with socially constructed categories. Applying this notion in sport leadership, the perspective holds that women in sport leadership face hindrances in acquiring leadership position because such behavior is less favorable when being acted by women than men who have traditionally held roles in the organization. Thus, keeping women to lag behind and seen as incompetent of the position. Putting forward this notion, thus, create an opportunity for the majority for homologous reproduction (Kanter, 1977) through which the majority will multiply themselves because of similarity of social and physical characteristics. In which this hold true in sport organizations as a male dominated industry where this system of reproduction is being done through hiring and promoting similar image, that is, men who are in the majority. This theory will significantly provide a deeper explanation to the existing structural organizations in Malaysia which is apparently dominated by men. Adopting homologous reproduction perspective will provide explanation whether or not the culturally male preference system of leadership in the country impact the underrepresentation of women in sport leadership positions. Subsequently, pipeline theory (Turkel, 2004) emerge as another theory that explains about the barrier for women in seeking for leadership position which holds that few women ever reach to top leadership positions because there have been few women in the lower level. This notion leads men to take advantage of producing more male leaders because of the belief that there have not been visible women long enough in the organizational pipeline wanting to advance in leadership.

Emphasizing the appropriateness of the interplay of the three theoretical perspectives to frame the current study, the experiences of the women sport leaders will be given meaning through social constructivist research paradigm that will allow them to construct their knowledge inductively. Essentially, it is these combined theories in the theoretical framework that will examine the sociocultural, organizational and personal experiences of the women leader participants that shape the construct of the reality of the social world where they live and work. Hence, the three theoretical perspectives act as the rationale of the current study and constructivist set of beliefs will provide greater explanation of women's underrepresentation in leadership positions of sport organizations. The figure below depicts the interplay of the three theoretical perspectives employed in the current study. It illustrates the intertwined relationships and how it collectively impacted women's underrepresentation in leadership position of sport organizations.

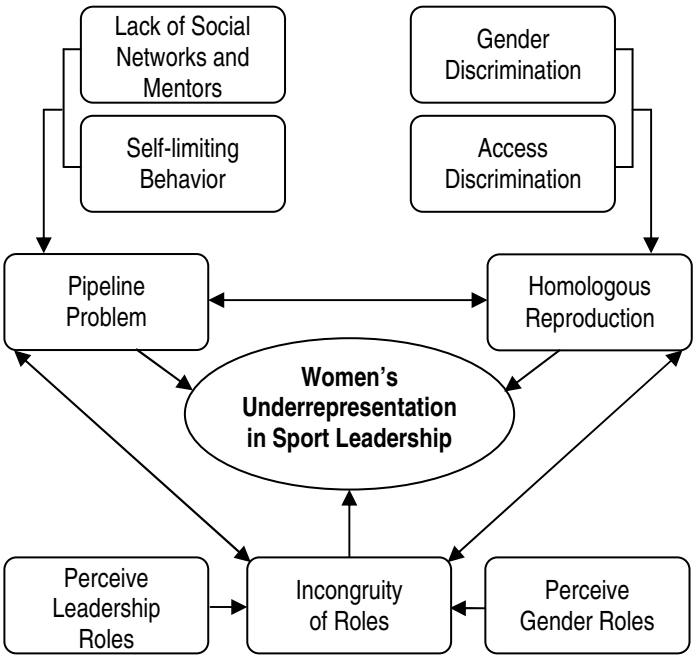

Figure 1. The interplay of the theoretical perspectives employed in the study.

In the context of women in sport leadership, previous research which examined the underrepresentation of women in leadership positions mostly employed either one of the theories previously discussed. It is not to say that the investigations of the previous research lack the depth and breadth of meanings (in fact, they established the platform for research discussion). But to some extent, there is still lack of in-depth research to explain the inextricably and intertwined meanings of the barriers that collectively affect women's underrepresentation in leadership position of sport organizations. Hence, the current study finds the relevance of employing the three perspectives of the theories with the conviction that the underrepresentation of women can be deeply examined and explained if the three interrelated theoretical perspectives will be jointly employed for better understanding and representation of the phenomenon.

Statement of the problem

The extant literature of women's underrepresentation in leadership position of sport organizations is a phenomenon that continuously receives attention in international and local platforms (Goslin & Kluka, 2014) which give way to more participation and involvement of women in sports at all levels. The increase of women athletes by 44% and women's participation in all sports for the first time in 2012 London Olympic (Factsheet London Facts and Figures, International Olympic Committee, 2012) and the FIFA reform for the inclusion of women as decision makers in the executive committee (http://resources.fifa.com/mm/document/affederation/footballgovernance/02/72/23/75/201510fifareformsubmissionwftffinal_neutral.pdf) could be an examples of the logical manifestations for requisite for career advancement in women's leadership. Nevertheless, while these opportunities, laws and policies have been established, women remain significantly underrepresented in top leadership (Burton, 2014). Women in sport leadership positions like administrators and decision-makers still faced obvious challenges that significantly limit the advancement for greater opportunities. Despite of the advances in women's equity and empowerment in leadership positions, women are still underrepresented (Huggins and Randell, 2007).

Sport management researchers have produced positive findings with regard to diversity in leadership positions among women (Fink & Pastore, 1999; Sartore & Cunningham 2007), but most of these studies focus on western women in different levels of sport leadership positions (e.g., Massengale: 2009, Hancock & Hums, 2014: Sagas, Cunningham, & Teed, 2006: Norman, 2010: Lovelin & Hanold, 2014: Hederson, Grappendorf, & Burton, 2011). A few studies have been conducted in Malaysia on the

underrepresentation of women in managerial or leadership positions; however, these studies focused more on business sectors, (see Jogulu & Wood, 2008; Osi, Ilac, & Amante, 2012; & Subramaniam & Arumugam, 2013), economics (see Mansor, 1994 & Saadin, Ramli, Johari, & Harin, 2016), as well as politics (see Sobritchea, 2000). However, studies on the topic of women's underrepresentation in the positions of managerial or leadership are very rare in the case of sport as an institution (Massengale, 2009). One study conducted by Megat Daud, Radzi, Abdullah, and Johari, (2013) looked at the challenges and reality faced by women managers which focused on sport industry. Thus, research on sport leadership experiences of Malaysian women in sport organizations receives very little attention among sport management researchers. In the Malaysian context of sport, women in leadership position continue to juggle their personality and manage many things in order to be relevant and struggle not to be discriminated. Although, Malaysian women have enjoyed opportunities to participate in the workforce in the country, and there have been women's policy that emphasized on women's equal opportunity yet, women's representation in sport associations are still low than their male counterparts (MegatDaud, Radzi, Abdullah &Johari, 2013).

There have been theories that explained the underrepresentation of women in leadership. Eagly and Karau (2002) hypothesized that women's underrepresentation in leadership is due to the incongruence of gender and leadership roles that contributed to prejudices towards women's aspiration to leadership positions. Moreover, homologous reproduction (Sagas, Cunningham & Teed, 2006; Lovett & Lowry, 1994), are organizational barriers; while pipeline problem (Whisenant, Miller, & Peterson, 2005; Massengale, 2009; Monroe & Chiu, 2010) are social and personal limitations which are believed to impede women's representation in leadership. Organization's homologous reproduction is a belief that dominant group (i.e., men in the study of Kanter, 1977) are likely to hire subordinates of the same gender. Likewise, pipeline problem is a notion that due to the sparse representation of women in the lower level of administrative roles (Whisenant, 2003; Grappendorf, Lough, & Griffin, 2004; Smith 2005), thus for a career progress into management and hiring in top leadership is even more difficult for women.

In the local setting of the current study, to date, there have been no studies conducted that examined the incongruence between gender and leadership roles, homologous reproduction and pipeline problem as a possible explanation of the underrepresentation of women in sport leadership in sport organizations. The validation of such claim was done through an extensive searching and browsing on the search engine or database such as, ScienceDirect, EBSCohost, Scopus, Eric, even Goggle Scholar and simple Goggle search of articles. The thorough exploration also includes searching on the key terms used in the study such as underrepresentation of women, women in sport leadership, organizational discrimination, and gender discrimination, as well as the theories employed in the study such as role congruity, homologous reproduction, and pipeline theory. Subsequently, no article that has been found particularly discussed the said topic. Given the dearth of research of women in sport leadership in Malaysia this study will explore the lived experiences of women leaders who are in top leadership position in national sport organizations. By giving voices to women leaders with their experiences of the phenomenon will provide in-depth understanding and will help explain the underrepresentation of women in sport leadership in sport organizations.

Research questios

In investigating women's underrepresentation in leadership position of sport organizations through the lived experiences of women in top leadership, the current research seeks to answer the research questions listed below.

1. How do women leaders perceive the underrepresentation of women sport leaders in top leadership positions of sport organizations?
2. What experiences do women leaders encounter that are associated with the incongruity of gender and leadership roles, homologous reproduction, and pipeline problem in sport organizations?
3. How do women leaders overcome the barriers associated to the incongruity of gender and leadership roles, homologous reproduction, and pipeline problem in ascending to top leadership positions of sport organizations?
4. How does incongruity of gender and leadership roles, homologous reproduction, and pipeline problem affect women's representation in top leadership position of sport organizations?
5. What strategies do women leaders employ to overcome the barriers in the underrepresentation of women in leadership positions of sport organizations?

6. What support can women leaders provide to other women aspiring for leadership positions in sport organization?

Significance of the study

The continuous issue of the underrepresentation of women in sport leadership position warranted a need for a more in-depth investigation for the issue to be better understood and addressed. By giving voices to the marginalized group in the realm of sports will pave platforms for more discussion and discourse that will eventually open for better opportunities and equity in rights and status. Not only because gender diversity in the leadership of sport organizations balance demographic and opportunities, but a diverse representation of individual in the organization has the potential to drive superior organizational effectiveness. In their study Doherty and Chelladurai (1999) noted that diverse demographic in an organization contribute to significant changes in legislative, economic and society. Further, organizations with a diverse workforce will attract the best and brightest employees (Robinson & Denchat 1997). Therefore, organizations with members of diverse gender perform better than less gender-diverse organization. Because women acquire different informational resources, able to intermingle in ways that develop group members' creativity and mutual relationship, than men (Eagly, 2013).

With the pursuit of contributing to the foregoing phenomenon this study is significant in several grounds. Firstly, although this phenomenological study will not generalize the whole context of leadership and in fact, generalization is not the main objective of this qualitative study – however, the in-depth and rich data that will be gathered from this study will provide useful information in understanding the underrepresentation of women in sport leadership. Thus, taking into account the lived experiences of women leaders, discriminatory practices and prejudices in sport organization will be addressed and changed. Considering further that sport organizations is one where there is an obvious persistent discrimination (Stangl & Kane, 1991; Cunningham & Sagas, 2005), the in-depth nature of this study is necessary to bring forward this issue. Secondly, the information from this study will provide insightful and in-depth understanding that will inform and influence policy makers to develop policies and laws that will strengthen a sporting culture. Whereby, women have equal opportunities, equal access, and equal support in all levels and in all capacities. That is, as decision-makers, administrators, managers, coaches, officials and participants. Wherein, this culture will provide an environment where the marginalized group will be supported and thus feel comfortable and confident in being a member of the organization. Thirdly, this study will also contribute to the extant literature on the underrepresentation of women in sport leadership of sport organization taking into account the perspectives of Asian women sport leaders. Whereby, this study will help bridge the knowledge gap in the sparse literature in women and leadership in sport organization in the local setting of the research. In conclusion, this study will provide greater understanding and insightful information to sport management researchers, women as future leaders in sport, and policy makers in promoting change, advocacy, and better organizational and sociocultural practices and policies.

Methodology

This study will employ a qualitative research design, which is deemed to be appropriate for the purpose of understanding the underrepresentation of women in sport leadership of sport organization with breadth and depth. Subsequently, this study will answer the questions focusing how social and lived experiences of the Malaysian women sport leaders were constructed and were given in-depth meanings beyond descriptions and correlations.

Research Design

Appropriate in particular, this research will employ a qualitative approach called phenomenology. This approach in qualitative research is a method that describes the meaning of several individuals for their lived experiences of a concept or a phenomenon (Creswell, 2007) and is believed to be adept in understanding the meaning of the events, situations and actions of the participants and the accounts that they give to their lives and experiences (Maxwell, 1996). Employing phenomenological constructivist method will allow the researcher to look at the complexity of the views, that is, to gather utmost information in multiple ways from the women leader participants and their environment in order to extend greater understanding of the theoretical perspectives underpinning the study. As such, the current study will engage a phenomenological study meant to investigate the issue with greater depth and rigor from the perspectives of the people who are directly involved in the phenomenon.

Research Setting

The current research will be conducted on women leaders who are among the executive management positions in Malaysia's national sport organizations with direct involvement in administration and policy making of the country's sports development programs. Through online assessment on Malaysia's national sport organizations, there are eight organizations with direct involvement in management, administration and policy making of sport development programs of the country. These organizations work through the process of development and implementation as far as sports laws and policies are concerns. As such, the following sports organizations are; Malaysian Sports Commission (MSC), National Department of Youth and Sports (NDYS), Olympic Council of Malaysia (OCM), National Sports Council (NSC), National Sports Associations (NSA's), National Sports Institute (NSI), Malaysia Sports School and Sports Division in the Ministry of Education.

Research Participants and Sampling Procedures

In this qualitative study, the researcher will engage in a purposive sampling to ensure that she would have the best people to provide information about women's underrepresentation in top leadership position of sport organizations in Malaysia. Particularly, the researcher will employ a type of purposive sampling which is called maximum variation sampling. This particular sampling procedure is appropriate for this study since there is only a small sample size in which the researcher purposely selects the participants who are involved directly with the phenomenon being studied. As such this study will employ maximum variation sampling through the use of selection criteria. Specifically, for this study the participants will include women who are currently holding the position in national sport organizations in Malaysia such as President, Vice President, Deputy President, Commissioner, Chairman, Executive Director, General Secretary, Honorary Secretary, and Executive Secretary. The woman leaders who will be identified within the eight national sport organizations will be recruited as participants for this study. Moreover, upon the researcher's assessment in the official website of the organizations, there are 19 women leaders concurrently holding a post in the executive board or top leadership positions representing the different sport organizations. Hence, all these 19 women leaders will be recruited as participants of the study and they will be sent official invitation letters to participate in this study.

Research Instruments

For the purpose of this study, the researcher will use three main types of research (or data collection) techniques to gather information-rich and diverse data. In particular, the study will employ semi-structured interviews, observations and document analysis. These three research instruments will be deliberately manipulated to elicit possible answers of the phenomenon under study and they are further discussed herein with its significance to the current study.

Interviews

The interview is particularly the most important method for data collecting in phenomenological research (Langdridge, 2007) and believed to be the gold standard in qualitative research (Barbour, 2008). In particular, this current study will employ in-depth, face-to-face, semi-structured interviews with open-ended questions. Through in-depth interviewing, the researcher will be able to capture the participant's voices and stories (Harding, 2003) with breadth and depth that will provide reflective and sensible information concerning the issue. Moreover, face-to-face, individual interviewing will also be the aim of the current study. With the additional purpose of developing a rapport with the participants, the researcher finds it beneficial to conduct the interview in person in order to allow the participants to convey their perceptions and stories of their lived experiences in a clearer picture.

Observation

In order to provide more meaning to the verbal accounts from the participants, observations will also be employed. Observation is another method of collecting data in phenomenological research where it adds important insights into the life or world of the participant (Langdridge, 2007). This is because through observation the researcher can take part of the social setting, learn firsthand on how the actions of the

participants correspond to their words, able to see patterns of behaviors, experience the unexpected, as well as the expected, and most importantly it develops a quality of trust, relationship, and obligation with the participants and others in the research setting. Observation also allow the researcher to develop further interview questions and will able to connect it to known behavior during observation where participants' answers can be better interpreted. For the current study, observations will be done in various settings possible to gather as much as possible rich information data.

Document Analysis

In addition to interviews and observations, reviewing and analysing pertinent documents will also help the researcher in investigating the incongruence of gender, leadership roles and underrepresentation of Malaysian women in leadership positions of sports organizations. Review and analysis of documents can raise questions about hunches and thereby shape new directions for observation and interviews. Through this medium, more information will be gathered that will deepen the understanding of the issue under study. Such documents that the researcher considers to be helpful in getting more data for the research will be the reports from gender and leader's demographics of the organizations, demographics of women's membership and participations in sports organizations, policies on leadership appointment, letters of appointment, meeting minutes, journals, books, magazines and newspaper articles. These documents are both official and personal and considered to be beneficial in the data collection process.

Data Analysis

Data analysis will follow Creswell's (2007) six steps process in phenomenological analysis and presentation, which begins with the researcher's full description of her experiences with the phenomenon under study to set aside the researcher's personal experiences so that the focus can be directed to the participants in the study. Second, is to form "initial codes" from the interview data and other data sources. Third, is to take the significant statements and group them into larger units of information called as "meaning units" or "themes". This is followed by writing a "textural description" or "what" the participants in the study experienced with the phenomenon. Next, is to write the "structural description" or "how" the experience happened. Finally, the researcher will write a composite description of the phenomenon incorporating both the textural and structural descriptions. This passage is the essence of the experience and represents the culminating aspect of the phenomenological study. In making sure that the data analysis is done with credibility and validity, the researcher will rely heavily on the identified theories and concepts that were identified in the theoretical frameworks. To emphasize trustworthiness of the data gathered and analyzed the researcher will employ triangulation, member checking, and transferability to make it more credible and reliable.

Conclusions

The overall purpose of the current study is to provide an in-depth understanding on women's underrepresentation in top leadership position of sport organizations. Although the results of this current study cannot empirically generalized (Mason, 2002) to a larger population with the non-statistically represented sample, however, theoretical generalization (Mason, 2002) arising from different logics of the data is relevant. The results may not be appropriate in the whole spectrum of women leaders and may not be realistic to some extent; nevertheless, it can be a reference in deeply understanding the underrepresentation of women in other leadership position particularly at the top level. The results will also be useful to other organizations who are interested on the underrepresentation of women and applying it to their own situation or other situation with similar context. Furthermore, employing the three theories are deemed significant to extend the transferability of the notion posited in different setting and subject.

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Impact Of Badminton Training On Physical Parameters Of Players

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Introduction

Badminton is considered to be merely a slow and light game for children, a game that can be played outdoorsor Indoor.Badminton requires jumping, changing directions, rapid arm movements and a broad range of body postures (Cabello et al. 2003), and also requires extremely explosive movements to be carried out over a small court area. Changes in direction are necessary after most shots and all movements must be completed quickly with good technique and control. Therefore, it is vital that programs of fitness assessment should reflect the very exact necessities of the sport.

Objectives of the Study

There is lack of information regarding the influence of basic technical training on some physical capacities and balance in children, and this study would help sports facilitators develop skill and competitive fitness and conditioning programs for badminton athletes, and think about special considerations about their skill and fitness training (Fletcher 1994). Thus, this study aims to investigate the effect of the basic technical skills training on the balance of some physical parameters in healthy, beginner level children.

Methods

Participants and Experimental Design

The experimental group included beginner level badminton players aged between 8-10 years old (female = 9, male = 12), while the control group included Elementary School students from the same age group (female = 10, male = 10).

Procedures

Before the collection of data, the objectives of the study and methodology of each test were explained to the subjects. An informed consent form was taken from the subjects signed by their parents or guardians. All of the subjects participated in the study were absent of any health problems or disability. The experimental group underwent the summer badminton training program for eight weeks, and five days per week. Each session was held for 60 minutes, while the control group was not exposed to any type of training. The fundamentals and practice of badminton skills such as passing, throwing, and hitting were implemented during the 8 weeks of the training. No special strength training was scheduled so that the subjects would not be exposed to harmful effects of strength training for this age group. The measurements were completed beforeandafter8weeksofthetrainingprogram. They included the assessments of length measurement, weight measurement, vertical jump, horizontal jump, and balancetests.

VERTICAL JUMP TEST PROTOCOL

Procedure: The subject stands side on to a wall and reaches up with the hand nearest to the wall. Keeping the feet flat on the ground, the point of the fingertips is marked or recorded. This is also known as standing reach height. The subject then stands away from the wall, and leaps vertically as high as possible using both arms and legs to assist in projecting the body upwards. The jumping technique does or donot use a countermovement. Attempt to touch the wall at the highest point of the jump. The difference in distance between the standing reach height and the jump height is the score. The best of three attempts is recorded score.

HORIZONTAL JUMP TEST PROTOCOL

The subjectsstand behind marked lineon the ground in feet to some extent apart. A two- foot takeoff and landing was used, with swinging arms and bending of the knees toprovide forward drive. The subjects tried to jumpas faraspossible,landingonbothfeetwithoutfallingbackwards.Themeasurementwastakenfrom takeofflinetothenearestpointofcontactonthe landing. The subject had to land with the feet together and stay upright. The distancewas calculated from the initial line to the end where the heel touched the ground upon finishing the test. The subjects tried it three times, and their best score wasrecorded.

Results

Therewerenosignificantdifferencesbetweenthetrainingandcontrolgroups'age,height,andthemeanbodyweight (p>0.05)after2monthsof training.

Thereareresignificantdifferencesintheverticaljumpperformancebetweentrainingandcontrolgroupsinboththepre-test(t=-2.563,p<0.05) aswellastheposttest(t=-2.337,p<0.05).Similar scores in standing broad jump performance inthepretest(t=6.476,p<0.05)andposttest(t= 7.448, p <0.05) were determined between the groups (TableI).

After two months of training it was determined that the vertical jump increased for the experimentgroup(t=-5.467,p<0.05).Itwasdetermined that the standing broad jump performanceshowedasignificantimprovementinperformancefortheexercisegroup(t=-5,045,p<0.05).Interestingly,thecontrolgroups'vertical jump (t = -2.091, p <0.05) and standing broad jump(t=-2.214,p<0.05)valueswerefoundto increasesignificantlyafter8weeks.

The mean differences for the vertical jump and vertical jump test parameters did not differ between training and control groups (Verticaljump:t=.413,p<0.05,standingbroadjump:t=.901, p <0.05).

Table I: Subjects' demographic characteristics

Variables	Groups	Pre- test		Post-test	
		Ẋ	∑	Ẋ	∑
Age (years)	Training	9.54	1.94	10.05	1.82
	control	10.05	0.686	10.07	1.67
Height (cm)	Training	141.50	7.80	142.65	8.04
	control	145.00	6.48	146.60	6.73
Body Weight (kg)	Training	37.67	8.29	38.69	8.59
	control	36.44	8.36	37.39	8.64

For before and after training, the subjects' average vertical jump scores are presented in TableII.Thereweresignificantdifferencesinthe verticaljumpperformancebetweentrainingand control groups in both the pre-test (t = -2.563,p<0.05) as well as in the post test (t = -2.337, p<0.05). Similar scores in standing broad jump performance in the pretest ((t = 6.476, p <0.05) andposttest(t=7.448,p<0.05)weredetermined between thegroups.

Table II: Mean and standard deviations ofvertical jump and standing broad jump forpre- and post-test

Variables	Groups	Pre- test		Post-test	
		Ẋ	σ	Ẋ	σ
Vertical Jump	Training	23.46	3.84	24.92	3.92
	control	26.20	3.24	27.40	3.03
Standing Broad Jump	Training	128.42	17.92	133.77	18.75
	control	98.70	11.35	102.44	9.24

Statistically significantly different from pretest, at p<0.05.

Statistically significantly different from Training Group, at p<0.05.

After two months of training, it was determinedtheverticaljumpincreasedfortheexperiment group (t = -5.467, p <0.05). It was determinedthatthestandingbroadjumpperformance showed a significant improvement for the exercisegroup(t=-5.045,p<0.05).Interestingly,the controlgroupsverticaljump(t=-2.091,p<0.05) and standing broad jumping jump (t = -2.214,p <0.05)values increased significantly after 8 weeks (Table III).

Table III: Mean differences between pre- and posttest

Variables	Groups	$\dot{X}$	σ
Vertical Jump	Training	1.46	1.36
	control	1.20	2.57
Standing Broad Jump	Training	5.35	5.40
	control	3.65	7.37

Bothparametersdidnotdifferbetweentrainingandcontrolgroups(Verticaljump:t=.413,p<0.05, standing broad jump: t = .901, p <0.05)(Table 4).

Discussion

Compared to other sports, not many studies investigate the physical and physiological pro-filesofbadmintonplayersintheliterature.The results of this study showed that the training program does not have anysignificanteffectontheverticaljumpingandstanding broad jumping in pubertal badminton players while balance performance are affectedpositively by theprogram.

This study assessed the vertical jumpingand standing broad jumping performances. It is suggested that competitive badminton consists of very explosive actions completed in a small area. Theresults of this study explored that the vertical jumpand standing jumpparametersdidnotdifferbetween training and control groups, standing broad jump. Surprisingly, training and control groups vertical jump and standing broad jumping jump values were found to increase significantly after 8 weeks. Thus, improvements in both groups may be attributed to the rapid growth of children for this age group.Itwas also recommended that racket sports such as tabletennis,tennis,badmintonandsquashrequire acombinationofpsychologicalstability,tactical analysis, motor coordination as well as strong physical and physiological attributes. Accordingtotheresultsofthestudy,eightweeksof badmintontrainingimprovesbalanceperformance of pubertal children.

Conclusion

The result of this study could be helpful for coaches and athletes to improve performance through selection and adjust suitable training program. The main goal of sports facilitators is todeveloptheplayers'physicalperformanceand proper growth of children athletes. To develop these abilities, the training circumstances must be transformed continually until positive adaptations in athletes occur and then athletic performanceimprovesandthemostsignificantpart oftrainingisamountandconcentration.Because of its attractiveness, badminton could be well adopted for children. The game with its basic rules is simple and could be started with it at an early age.

Recommendations

Children continue to grow and demonstrate expected increases in their strength. Therefore, any research to inspect strength gains in a child must combine an acceptable control to account for regular growth.

The exercises such as rebounding andLongjumping maybeanindicatorofreadinesstoparticipateinformalweighttraining exercises. A focus on harmless training and individualself-improvementmustbeofconcern to sports facilitators instead ofcompetition.

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The Effect Of Small-Sided Games In The Development Of Technical Demands Of U-17 Male Youth Football Players In The Case Of Bahir Dar City Project.

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Abstract
The present study was to examine the effects of small-sided games in the development of technical demands of under - 17 male football youth players. For the purpose of the research Bahirdar City U-17 Male football players were selected purposely. All of the members of the team 32 individuals' (ages 15 to 16 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 of U-17 football project players.**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).
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 Bahir-Dar U-17 male football projects.
The present study sets out to investigate the effect of Small-Sided Games in the development of technical ability of U-17 football players in Bahir Dar city. 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 (less than 16 years of age) 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 U-17 football project players' technical skills in Belay Zeleke football project that found in Bahir Dar city administration.

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 U-17 players in Belay Zelek youth football project.

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 U-17 football players.

H1a: Small-Sided Games have a significance outcome on the development of dribbling skills of U-17 football players.

H1b: Small-Sided Games have a significance result on the progress of passing skills of U-17 football players.

H1c: Small-Sided Games have a significance effect on the improvement of shooting skills of U-17 football players.

Significance of the Study

This study has the following benefits:

The U-17 youth football players 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 youth and sport affair bureau, 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 in Belay Zeleke U-17 male football project.

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 the Belay Zeleke project administration to bring solutions on the technical demands of Small-Sided Games for youth players.

Scope of the Study

Among the three male football projects in Bahir Dar city administration, the preferable project for my study was Belay Zeleke project. The study was only focus U-17 male football players in Belay Zeleke project. The study uses 32 male football players in the project 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 U-17 male football players, in Belay Zeleke project.

Specific objectives of the study

The specific objectives of this study were to:

Find out the effect of small sided-sided games (4v4 and 8v8) on using both feet dribbling skill development of U-17 football project players

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 a community football project. They had trained in the 2006e.c Under 15 football training. All the participants gave written consent to participate in accordance with the Belay Zeleke football project ethical procedures. The researcher assigned the U-17 Belay Zeleke project 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 of U-17 male football players in Belay Zeleke project.

Sample and sampling technique

The total population of the study was 32 youth foot ball players in the U-17 male football project in the selected city. Purposive and simple random sampling techniques were used under this investigation. Purposive sampling technique was used to select the football project 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 U-17 players will be 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

IV. 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 of 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 of 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 U-17 players 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 of 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			

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 youth football project trainees' 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:

Coaches, working in the youth project should plan, organize and implement different small sided games skill enhancement programs that can be implemented by them.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, coaches in the U-17 youth football players should focus on the SSGs.Coaches should designed different small sided game training according to the age and participant of players for the technical and tactical development of football at the youth level.

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Influence Of Physical Education And Sports In Students Life

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Abstract
Participation in physical activities has been found to be an important factor in contributing to a healthy lifestyle. Research has found strong relationships between participation in regular physical activity and the prevention of disease, while its relationship to the psychological and social dimensions has been neglected. Recently however, several studies have found causal relationships between physical activity and improved mood state, reduced anxiety, reduced depression, and increased social support. Despite this, surveys indicate that participation levels in physical activities are declining among older Indians, with the exceptions of walking and gardening.This paper also examines the constraints to participation in leisure programs, such as lack of time, poor health, and fear of crime, the financial cost and the lack of a partner to participate with. A number of strategies have been suggested to overcome these constraints.
Keywords: Participation, healthy, relationships, depression, constraints, financial

Introduction
Sport advocates often suggest that sports participation cultivates moral development, Sportsmanship, fair play, self-reliance and courage, to name but a few 'desirable' character traits commonly associated with the sport experience. However, empirical evidence to support these claims is fragmented and less than convincing; indeed much of the literature supporting the character-in-sport phenomenon is only anecdotal nature. In this paper, the social psychological construct of character is defined with particular emphasis placed on the central element of character - that is, moral reasoning. The literature on moral reasoning in sport is then selectively reviewed and conclusions are drawn regarding the efficacy of the claim that "sport builds character". The relative merits of organised sport and informal games are also discussed with respect to moral and character development, and the potential positive and negative developmental outcomes of participation in organised sport are outlined. Finally, some brief recommendations are offered regarding future research directions and the practical steps required increasing the developmental benefits of sport participation. The positive impact of participation in sport and active recreation on physical health is now well accepted. Research has identified a wide range of sport-induced health benefits including improving cardiovascular health and assisting in the development of strength and balance. In light of this, governments at all levels have become increasingly active in encouraging people to adopt physical activities as a regular part of their lifestyle. In contrast, much less is known about the social impact of sport and physical recreation and, in recent years, there has been an increasing focus on, and interest in, identifying such impacts.

Objective
To determine whether involvement in sporting activity would determine the behaviour of people and their Health in the Adolescent.

Effects of Physical Activity on Children's
The research available on the effects of physical activity on children's mental health suggests that children are not immune to psychological problems, although the sources of such problems are likely to be different to adults. Various studies are discussed which show linksBetween physical activity

participation and mental and physical health. For example one study found that illness was associated with stress, but was significantly mediated by both aerobic and anaerobic exercise. Negative effects that may result from involvement in physical activity are also discussed. These include eating disorders and stress derived from competitive sport.

The Impact of Physical Education on Brain Function and Academic Achievement

Proponents of physical education often declare that participation in their subject area has a positive impact on academic achievement. If these assertions are to be believed, we must specifically look at the impact of a standards-based physical education curriculum. A standards based physical education curriculum follows an appropriate set of objectives and goals based on national recommendations. Therefore, since physical activity is a primary focus in physical education curricula, the relationship between physical education and academic achievement may be observed though the potential academic benefits of physical activity. Research literature consistently reports that children who participate in quality physical education are physically active outside of the school setting. We know that the activities in which students are taught during physical education (e.g., sports, games, exercise) are directly related to activities and sports students participate in outside of school.

Review of Literature

Andruschko (2013) found well-planned physical education curricula, in comparison to poorly planned programs, to have potentially large benefits on children's physical activity outside of the school. Another study reported that physical education increases daily physical activity and decreases sedentary time in middle school age children (Chen et al., 2014). In the long term, Trudeau et al. (1999) found daily primary school physical education to have a strong positive effect on the exercise habits of adults. To note, brain function includes cognitive skills while academic achievement includes learning behaviours (e.g., on-task behaviour, planning, and organization) and performance on subject-area standardized tests and other formal assessments.

The Impact of Quality Physical Education on Healthy Living

The public is generally aware that being healthy is important. However, the public may not know, or understand, the importance of physical education. Opinions regarding past physical education experiences in school often distort the link between quality physical education and personal health. Central to the association between physical education and health is the teacher. Teachers trained as physical educators exhibit higher levels of effective teacher behaviours (Constantinides et al., 2013) and create quality physical education programs. Trained physical education teachers can achieve, for example, greater physical fitness improvement in children than physical education teachers who lack appropriate training (Starc & Strel, 2012). According to the latest Shape of the Nation Report (NASPE, 2012), both the *National Association of Sport and Physical Education* and the *American Heart Association* believe physical activity achieved through participation in physical education improves one's overall well-being and is one of the best preventers of significant health problems linked to many chronic diseases (e.g., obesity, high blood pressure, and high cholesterol). No other school subject has the potential to fulfill these health needs. If schools are to make a positive impact on our children's' health now and in the future, physical education must be present in schools, be taught by qualified teachers, and focus on healthy behaviors.

Results

Results suggest that the physical fitness program had a positive influence on both substance abuse risk factors and actual substance abuse patterns. Significant increases in fitness, ratings of self-concept and anxiety were obtained along with significant decreases in multiple drug use.

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Study On Prevalence Of Obesity Among Women In Selected Area Of Tamilnadu

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Abstract
Obesity is a major health issue in current scenario .Women are more prone to gain weight as age progress. The aim of this study is to assess the prevalence of obesity among married and unmarried women using BMI .This descriptional cross sectional study was conducted in vellore of Tamilnadu among Married and unmarried women. 20 married women who were not having children and 20 unmarried women aged between 20-35 years were selected by random sampling method. Married women who were not having children Questionnaire was used to record the socio-demographic profile of women after obtaining informed consent.The body mass index (BMI) was calculated using Quetelet index. Datas were analysed using Mean ,percentage and t test .Results showed that majority of both married and unmarried women were unemployed and there was significant difference in BMI among married(not having children) and unmarried women at $P < 0.05$.Among married women majority of 55% were found to be overweight and 60% unmarried women were found to be having normal weight.
Key words:obesity,married women,unmarried women, body mass index.

Introduction.
Overweight and obesity are major risk factors for a number of chronic diseases. An esti-mated 300,000 people die each year of illnesses related to obesity, more than the number killed by pneumonia, motor vehicle accidents and airlines crashes combined [1]. Obesity is increasing around the world. High body mass index now ranks with major global health problems. While some studies have found that current marital status is itself correlated with body weight and obesity [2], other research suggests that marital transition—the act of moving from one marital status to another—is also important in predicting body weight changes and the behavioral risk factors associated with weight gain [2]. BMI is frequently used in population studies because of its ease of determination and well-supported association with mortality and health effects. Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m^2) Marital status (MS) has also been shown to be associated with BMI and most cross-sectional studies tend to find that married people are more often overweight and obese than those living alone; however, important variations exist according to gender and ethnicity [3,4].

Methodology.
This descriptional cross sectional study was conducted in vellore of Tamilnadu among Married (not having children) and unmarried women. Samples were selected by organizing medical camps.Both men and women of different age groups attended the camp .Among them twenty married and unmarried women aged 20-35 years were selected by random sampling method. Pregnant women were excluded from the study. Questionnaire was used to record the socio-demographic profile of women after obtaining informed consent. Height was measured using stadiometer and weight was measured using electronic weighing machine. The body mass index (BMI) was calculated using Quetelet index. Asian classification of obesity[5] was used . The independent variables considered for this analysis were married(not having children) and unmarried women. Dependent variables include age, and marital status.. Analysis was done in Microsoft excel and SPSS version 20.0.Datas were analysed using Mean ,percentage and t test . $P < 0.05$ was taken as significant.

Results.

Obtained datas were analysed .The table-1 below shows the Mean Standard deviation and Obtained t value of BMI level among married and unmarried women.

Table- I:Mean Standard deviation and Obtained t value of BMI level among married and unmarried women.

Name of the Group	Mean BMI	SD	Obtained t Value	Table t Value
Married	26.5	2.264554	6.1871*	1.99
Unmarried	18.775	1.476092		

* significant at .05 level of confidence.

The mean value of married women is 26.5 and unmarried women is 18.775. The standard deviation of married group is 2.264554 and unmarried is 1.476092. The obtained t value 6.1871 is greater than the table value of 1.99 at .05 level of confidence and hence it is significant.

The number of married and unmarried women were categorized according to their BMI Values as underweight, normal ,overweight and obese. Table -2 shows the assessment of BMI among Married and Unmarried

Table-2:BMI Assessment Among Married and Unmarried Women

S.NO	MARITAL STATUS	UNDERWEIGHT		NORMAL		OVERWEIGHT		OBESE	
		No	%	No	%	No	%	No	%
1	MARRIED	2	10	5	25	11	55	2	10
2	UNMARRIED	5	25	12	60	2	10	1	5

Among married women 10% were found to be underweight,25% were found to be having normal weight,11% were found to be Overweight and 10% were found to be obese. Among unmarried women 25% were found to be underweight,60% were found to be having normal weight,10% were found to be Overweight and 5% were found to be obese.

Discussion

The results of the study shows that there is significant difference in BMI Values between married and unmarried women. Mean BMI value of Unmarried group showed that they were having normal weight, but mean BMI value of married group depicted they were overweight. Though married women were not having children they found to be over weight than unmarried women .Marriage gives new responsibilities and a married woman feels exhausted in Managing work and household chores Chaotic eating pattern often leaves women putting on weight[6]. They often feel stressed with the new set of responsibilities which is one of major cause of weight gain. Similar results were observed by Klos LA et al 2013[7]They examined the relationship between marital status and weight related variables among adult individuals and concluded that marital roles appear to influence their perceived and desired weight, suggesting that weight management interventions should be sensitive to both marital status and gender differences.

Al-Malki JS et al 2003[8] conducted a study to determine the prevalence of overweight and obesity in Saudi females of childbearing age. results of the study showed Significant increase in the prevalence of both overweight and obesity with age. Unmarried and married females were compared and the latter had a higher prevalence of both overweight and obesity compared to the former.. The prevalence of overweight and obesity was higher amongst a group of married women than among a group of single women and concluded that there is an urgent need to spread awareness about obesity, its consequences and ways and means of prevention among the females.

Conclusion.

Obesity is one of the most pervasive, chronic diseases in need of new strategies for medical treatment and prevention. In general, married women were more likely to be overweight and obese than un married individuals. The results concludes that married women (not having children) were overweight and unmarried women were having normal weight.

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Anthropometric And Body Composition characteristics Of Ethiopian National League Soccer Players Across And Withinnations By Playing Position

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Abstract
The objective ofthis study was to investigateBCAV of Ethiopian national league soccer players (ENLSP) by playing position and then to compare the result obtained across nations specifically with English Premier League soccer players (EPLSP) and Brazilian professional soccer players (BPSP).A total of 257 soccer players'BCAVwere gathered and analyzed via a cross-sectional study design. Among these subjects, 75 were fromENLSP while the remaining 64 and 118 soccer players were from EPLSP and BPSP respectively.Both primary and secondary source were used as a means of data gathering tools.Body composition of ENLSP was assessed by bioelectrical impedance analyzer (BIA), HBF-362, Japan. While stature of the subjects was measured using a device HM-200PW-wall mounted stadiometer to the nearest 0.1 cm.All thenecessaryEPLSPand BPSP data were obtained as a secondary source from reputable published journals. The primary data were analyzed using SPSS in a one way-ANOVA followed by Post-Hoc-Tests of Schefftfor Multiple Comparisons of both means and significance difference among groups. The level of significancewas set at $p < 0.05$. Measurement values were compared within and across nation based on players playing position. The result obtained in this study revealedthat, except the lean body mass, which shows significant difference ($p< 0.05$) among groups by playing position the remaining four variables, viz. height, body mass, body mass index and percent body mass did not show any statistical significant difference ($p > 0.05$) within nation in the selected clubs. Regarding the issueacross nation,the finding indicated that the ENLSP body composition and anthropometric characteristics showed significant difference ($p <0.05$) when it compared to EPLSP and BPSP. In conclusion, ENLSP body composition and anthropometric characteristics did not match with their playing position andalso it showed great dispersion when the result wascomparedacross nations by playing position.
KEY WORDS*:* Bioelectrical impedance analyzer,stadiometer,Body composition,

Introduction

Soccer is the most popular sport in the world;approximately 250 million people play the game, (Reilly & Williams, 2003). Among various variables, body composition, anthropometric dimensions and morphological characteristics play an important role in determining the success of an athlete including soccer players(Reilly, 1996 and Keogh, 1999).Anthropometric factors can determine the positional role most appropriate for the player. Body adiposity is highest among players pre-season but players at major international tournaments (with the exception of the goalkeeper) tend to have very little surplus fat.Higher values are found in goalkeepers than in outfield players, probably because of the higher metabolic loading imposed by match-play and training on outfield players (Reilly and Dominic, 2003).

Some studies indicated that execs body fat (BF) is inversely proportional to performance this is due to a deleterious effect of fat upon general locomotion and soccer-specific actions such as jumping to contest aerial possession of the ball (Reilly T., 2007;and Nikolaidis & Karydis, 2011).

The purpose of this study was twofold (a) to examine the anthropometric and body composition profile ofEthiopian national league soccer players based on their specific playing positions. (b) To compare andevaluate the result withEnglish Premier League and Brazilian professional soccer players by playing position too. Therefore; based on the aboveobjectives, itwas hypothesized that the anthropometric and body composition variables of Ethiopian national league soccer players do not consider their playing position. It was also hypothesized that Ethiopian national league soccer players anthropometric and body composition variables did not resemble with English and Brazilian professional soccer players by playing position.

Methods

On the basis of the objective of the study, both primary and secondary data were collected. In the case of ENLSP,primary data were collected while in the case of EPLSPand BPSP the required anthropometric and body composition profiles of the soccer players were gathered from secondary sources. Therefore, the data were conceived to be reliable.To achieve the intended objectives, a quantitative cross-sectional research design was used.

This study examined a total of 257 soccer players.Among this, 75 players were obtained fromthreevolunteers' Ethiopian's national league soccer cubs' viz. Fasil Ketema, Bahir Dar Ketema&AwiEnpiletaq. In this clubs 6-goalkeepers, 24-defenders, 15 attackers and 30-midfild were actively participated and considered as a primary sources. The age of the subjects were ranged between 20 to 30 years (mean 24.35 ± 2.75 years).The players playing position was obtained from each clubs coaches. The remaining 64 and 118 soccer players were sought from EPL and BPSP respectively.

Material Used

In this study the body composition profile of the players were measured by bioelectrical impedance analyzer (BIA),HBF-362, Japan in the year 2016/17. Subjects' stature was measured using a device HM-200PW-wall mounted stadiometer to the nearest 0.1 cm.

Statistical Analysis

Data were presented as means and standard deviations (Mean ± SD). Descriptive statistics including mean, standard deviation, minimum and maximum were computed for all variables. The data were collectedand analyzed carefully using the SPSS, PC program, version 15 (SPSS Inc., USA). The independent samples t-test and a one-way ANOVA were used to determine if differences are significant or not in all the anthropometric and body composition variables within and across nations by playing position (goalkeepers, defenders, midfielders and attackers). The result was followed by Post Hoc Tests of Schefftfor Multiple Comparisons of both means and significance difference among groups comparisons were performed when significant F-ratios were found. The level of confidence or significance level was set at $p < 0.05$.

Results And Discussion

The present study was designed to investigate the anthropometric and body composition characteristics of Ethiopian national league soccer Players across and within the nations by playing position.

I. Results within Nation:

The general anthropometric and body composition descriptive statistics of Ethiopian national league soccer player (ENLSP)is depicted in table-1.

Table 1.General Anthropometric and Body Composition Profile ofENLSP.

Source: *Primary Data*

Variables	N	Rang	Min.	Max	Mean	Std. Dev.
Age(y)	75	10.00	20.00	30.00	24.3571	2.75162
Height(m)	75	.20	1.61	1.81	1.7300	.05200
Weight(kg)	75	32.40	56.10	88.50	68.9321	7.31098
Subcutaneous Fat (%)	75	8.70	10.20	18.90	14.0500	2.33944
Skeletal Muscle (%)	75	5.80	31.60	37.40	34.2321	1.48650
Body fat (%)	75	13.10	14.10	27.20	20.2179	3.54882
BMI (Kg/M^2)	75	12.40	19.70	32.10	23.0857	2.30743
Visceral Fat (%)	75	6.00	3.00	9.00	6.2857	1.48716

Table-2.Anthropometric and Body composition Profile of ENLSP by Playing Position.

By Playing Position	Height (m)	Body mass (kg)	BMI (kg/m2)	Fat (%)	Lean mass (kg)
Goalkeepers (n = 6)	1.7467±0.06	69.30±6.87	22.63±0.78	19.60±3.00	55.753 ±0.051
Defenders (n =24)	1.7260 ± 0.36	69.5800± 4.51	23.46±0.72	20.1800±3.15	56.341±3.57
Midfielders (n = 30)	1.7273±0.05	68.6636±5.01	22.94±1.45	21.4091±3.68	61 .432 ±3.42
Strikers (n = 15)	1.6949±0.07	66.5400±10.92	23.02±1.89	20.04±4.68	53. 0451±3.51

Source: *Primary Data*

Table 2. Indicate the anthropometric and body composition profile of Ethiopian national league soccer players. The results are stated in mean and slandered (±) value. The mean age of the players was 24.3571 ±2.75162.

Table-3.Anthropometric and body composition comparisons of ENLSP between and
Within groups by playing position (ANOVA -Mulitple comparison).

Table-3 depicted the ANOVA and post hoc test multiple comparisons statistical results
***The mean difference is significant at the .05 level. Sq. Means Sum of squares&df. Is* degrees of freedom

Variables	comparison	Sq.	df	Mean Square	F	Sig.
Height	Between Groups	.009	3	.003	1.096	.370
	Within Groups	.063	72	.003		
	Total	.071	75			
Body mass	Between Groups	20.476	3	6.825	.160	.922
	Within Groups	1025.685	72	42.737		
	Total	1046.161	75			
BMI	Between Groups	1.521	3	.507	.211	.88
	Within Groups	57.816	72	2.409		
	Total	59.337	75			
Percent body fat	Between Groups	29.785	3	9.928	.768	.523
	Within Groups	310.256	72	12.927		
	Total	340.041	75			
Percent Lean mass	Between Groups	420.803	3	140.268	3E+031	.000
	Within Groups	.000	72	.000		
	Total	420.803	75			

Table-4.ENLSP- Multiple Comparisons of Variables between and within groups based on Playing position

(I) POSITION	(J) POSITION	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
		Lower Bound			Upper Bound	Lower Bound
GK	DF	2.12000(*)	.00000	.000	2.1200	2.1200
	MF	-5.88000(*)	.00000	.000	-5.8800	-5.8800
	ST	2.71000(*)	.00000	.000	2.7100	2.7100
DF	GK	-2.12000(*)	.00000	.000	-2.1200	-2.1200
	MF	-8.00000(*)	.00000	.000	-8.0000	-8.0000
	ST	.59000(*)	.00000	.000	.5900	.5900
MF	GK	5.88000(*)	.00000	.000	5.8800	5.8800
	DF	8.00000(*)	.00000	.000	8.0000	8.0000
	ST	8.59000(*)	.00000	.000	8.5900	8.5900
ST	GK	-2.71000(*)	.00000	.000	-2.7100	-2.7100
	DF	-.59000(*)	.00000	.000	-.5900	-.5900
	MF	-8.59000(*)	.00000	.000	-8.5900	-8.5900

Table-4 indicated the percent lean body mass separately from the other four variables. This is because unlike to the four variables only, the lean body mass of players shows significant statistical difference ($p< 0.05$) between groups by playing position.

II.Results across Nations

Table-5. Body composition of EPLSP by Playing Position

Variables	Playing Position			
	Goalkeepers (n=8)	Defenders (n=20)	Midfield players n=22)	Forwards (n=14)
Height (m)	1.90±0.03a,b	1.84±0.06a	1.78±0.05	1.80±0 .08
Mass (kg)	91.2±4.6a,b	86.0±7.3a	78.0±5.8	82.7±5.6
Lean mass (%)	79.9±1.2	81.4±2.2	81.1±1.9	82.3±2.1
Body fat (%)	12.9±2.0c	10.6±2.1	10.2±1.8	9.9±2.0

Key: EPLSP: English Premier League soccer players
[a]Significantly different from midfield players ($p<0.05$).
[b]significantly different from forward players ($p<0.05$).
[c]significantly different from defense, midfield and forward players ($p<0.05$).

Source:
Sutton, L., ScotT, M., Wallace, J., & Reilly, &. T. Body composition of English Premier League soccer players: Influence of playing position, international status, and ethnicity. Journal of Sports Sciences 2009; 27(10): 1019–1026.

Table- 6.Anthropometric data and body composition in BPSP by playing position.

Positioning	Height (cm)	Body mass(kg)	% fat	Fat mass (kg)	Lean mass(kg)
Defenders (n = 20)	183.75 (191.5 -178)	83.9 (89.6-78)	11.59 (13.5-5.8)	8.38 (12.45-4.44)	69.07 (79.54-62.78)
Midfielders (n = 41)	176 (193-165)	70.8 (91.4-60.8)	11.53 (15.02-8.72)	8.05 (11.83-5.5)	62.41 (79.71-55.49)
Goalkeepers (n = 12)	188.75 (201-183)	83.9 (89.6-78)	12.47 (14.01-9.54)	10.60 (12.19-7.65)	74.18 (77.5-69.89)
Strikers(n = 24)	177.25 (193-165)	72.05 (91.4-64)	11.41 (15.02-8.75)	8.14 (13.14-5.96)	64.01 (79.93-57.88)
Running backs (n = 21)	175 (181-165)	69.7 (78.8-62.2)	11.19 (13.28-916)	8.26 (10.6-8.05)	62.41 (68.33-56.15)

Key: BPSP: Brazilian professional soccer players
Numbers on the tops are meanwhile in brackets are minimum and minimum respectively.

Source:*Prado, W. L., Botero, J. P., Guerra, R. L., Rodrigues, C. L., Cuvello, L. C., & Dâmaso, A. R. (2006). Anthropometric profile and macronutrient intake in professional Brazilian soccer players according to their field positioning. Rev Bras Med Esporte , 52e-55e*

Table-7: Anthropometric and Body composition Profile of Nationsby playing position:

Variables	Nations	Playing Position			
		Goalkeepers	Defenders	Midfielders	Forwards
Height (m)	ENLSP	1.7467±0.06	1.7260 ± 0.36	1.7273±0.05	1.6949±0.07
	EPLSP	1.90±0.03	1.84±0.06	1.78±0.05	1.80±0.08
	BPSP	1.88	1.83	1.76	1.77
Mass (kg)	ENLSP	69.30±6.87	69.5800± 4.51	68.6636±5.01	66.5400±10.92
	EPLSP	91.2±4.6	86.0±7.3	78.0±5.8	82.7±5.6
	BPSP	83.9	83.9	70.8	72.05
Lean mass (%)	ENLSP	55.753±0.051	56.341±357	61.432 ±342	53.0451±351
	EPLSP	79.9±1.2	81.4±2.2	81.1±1.9	82.3±2.1
	BPSP	74.18	69.07	62.41	64.01
Body fat (%)	ENLSP	19.60±3.00	20.1800±3.15	21.4091±3.68	20.04±4. 68
	EPLSP	12.9±2.0	10.6±2.1	10.2±1.8	9.9±2.0
	BPSP	12.47	11.59	11.53	11.41

Key: *ENLSP = Ethiopia National league soccer players by playing position*
EPLSP = English Premier League soccer players by playing position
BPSP = Brazilian professional soccer players by playing position

The above table-7 shows precisely the anthropometric and body composition data of the three different nations of soccer players by playing position.

Discussion

The body composition and anthropometric profilesof soccer players' by playing position are naturally dissimilar, this is due to the demand of the position. In connection to this various studies supported and reported the presence of heterogeneity in soccer players among playing position with most differences being observed between goalkeepers and the outfield players. The goalkeepers were the tallest and heaviest of the soccer players, and demonstrated greater percent body fat than the outfield players this is probably because of the higher metabolic loading imposed by match-play and training on outfield players (Reilly &williams, 2003; Pardo *et. al.*2006;Gerosa-Neto, et al.2014).

Sutton et al. (2009) studies also indicated that the defenders were taller and heavier than the midfield players. The defenders constituted the tallest and heaviest outfield group. Midfielders tended to be the smallest lightest and had significantly less lean mass than defenders.

The above two tables (table -5 and table-6) shows the English Premier League and Brazilian professional soccer players anthropometric and body composition profile respectively within the club. In both case the studies clearly reported the presence of body composition and anthropometric heterogeneity when the data was analyzed based on playing position; (Pardo et*. al.*2006; Sutton et al. 2009).

Unlike the aforementioned studies, the finding of the present study was quite different when data was analyzed within the nation by playing positions.

As indicated in the above table-3; the current study examined all the anthropometric and body composition profile of ENLSP by playing position. The ANOVA and post hoc test multiple comparisons statistical results reveled that except lean body mass percentage, which showed statistical significant value ($p<0.05$), in all the remaining variables (height, body mass, BMI, and percent body fat) statistical difference were not obtained ($p>0.05$). This indicated that the team composition by playing position was not different, which is actually wrong.

Conclusion

In conclusion,coaches of ENLSP should give due attention for the anthropometric and body composition profile of players by playing position rather than focusing on technical and tactical skills of the players.

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Effect Of Aerobic And Calisthenics Exercise During Fasting Season On Body Composition Among Urban Dwellers

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Abstract
Obesity and overweight is the manifestation of this modern era. The purpose of the present study was to examine the effect of aerobic and calisthenics exercises on body composition during great lent season(8-weeks/56 days)among middle aged overweight urban dwellers. In this study 72 male overweight sedentary individuals,who qualified the criteria, were selected as a study subject. Subjects were categorized in to three differentgroups (Exp.G-1; Exp.G-2 and control group). The necessary anthropometric and body composition measurements of the groups were taken before and end of great lent by HM-200PW-wall mounted stadiometer and bioelectrical impedance analyzer respectively. Independent and paired samples t-test and analysis of variance (ANOVA) was employed to compare significance of difference from pre-to-posttest among the experimental and control groups followed by post hoc test multiple comparison of both means, P-values of < 0.05 were considered as significant. In the first group (who received both exercises and great lent) except the free fat mass (FFM) the remaining three variables (body weight, BMI, body fat percentage) were significantly reduced ($P < 0.05$) at the end of the intervention. In the second group of subjects (who received only great lent) all variables were significantly reduced including the FFM ($P < 0.05$). In the third or control group, there were no significant difference ($P > 0.05$) was observed in all four variables. The major finding of the current study was that FFM was maintained only in the first group of subjects with the potential impact of the inclusion of selected calisthenics exercise, which was not observed in the second group.Thus, from this study it was possible to conclude that subjects were much more benefited if aerobic exercise was combined with calisthenics exercise during great lent to preserve FFM than great lent alone, however; this does not mean that great lent is unimportant in alteration of body composition.
KEY WORDS: Great lent, Body composition, urban dwellers, calisthenics exercise.

Introduction

We live in an era of rapid lifestyle change, which does not provide our body with sufficient physical activity. Now a days due to the effect of globalization, poor time budgeting,lack of awareness, and commitment,we Ethiopians do not give time to exercise. Our life styles are unnecessarily targeted on internet and make ourselves busy with a sedentary lifestyle, as a result we are redirecting our own health to the wrong direction such as cardiovascular and metabolic disease of **t**ype II diabetes**, and others also. According to** (WHO, 2010) report, hypo-kinetic diseases is not only limited in highly developed countries but it also affecting middle and low income countries. As a result of this, physical inactivity has been identified as the fourth leading risk factor for global mortality, 6% of deaths globally.

The effects of exercise and/or dietingon health through religious fasting have recently been the subject of scientific inquiry, with most of the research being performed in the last two decades **(**Trepanowski& Bloomer, 2010 and William and Mark, 2014).Despite this, empirical studies regarding to the effect of Ethiopian Orthodox Christians great lent which is also known as "Hudadi" or "AbbiyTsom" andthe effect of

aerobicand callisthenic exercise during great lent which is a period of 8-weeks(56 days)on body composition among middle aged sedentary overweight individuals living in Bahir Dar, Ethiopia, were not investigated.Therefore, the purpose of the present study focused on the aforementioned problem area. This study hypothesized that subjects who were exposed for both intervention simultaneously (exercise and great lent) would show great body composition profile change than those subject, who received only fasting through great lent.

Methods

Subjects

This study was conductedduring great lent(8-weeks/56-days) at Bahir Dar city, Ethiopia, in one of a voluntarily organized community based fitness clubs and among the dwellers duringApril and May, 2016. A total of eight-seven (N=87) subjects who qualified the health history questionnaire and other criteria were selected as the subjects of the study.

Experimental Design, Material And Procedure

The study was field experimental research design. Subjects were divided in to three different groups. The first group,who showed commitment to receive both intervention (exercise i.e. selected aerobic and calisthenics and great lent)was placed as experimental group one (Exp.G-1), in this group initially a total number of 30 subjects were placed.In the second group thirty (N=30) subjects whose lifestyle and eating habit was similar to that of group one was obtained, however; this group of subjects (Exp.G-2), did not receive exercise on a voluntarily based due to the 8-weeks (56-days) of great leant. Again, other group of subjects (N=27) were obtained as control subjects (Exp.G-3). The latter group of subjects were neither attend in great lent nor participate in any form of exercise program, however; served for controlled purpose.Even though; the program had been launched in that manner, a total of fifteen subjects (N= 15) i.e.(3-subjects from first group, 5-from the second group andlastly 7-subjects from the control group)were withdrew from the study program.The dropped outcase of the subjects was different, some were personal and others were transfer cases. Therefore, the study excluded this group of individuals; however a total of 72 subjects were successfully completed the intervention.

Subjects' height was measured using a device HM-200PW-wall mounted stadiometer to the nearest 0.1 cm.All body composition variables (weight, BMI, Visceral fat, subcutaneous fat percentage and skeletal muscle percentage) were determined by bioelectrical impedance analyzer /BIA/,HBF-362, Japan, one day ahead of great holy lent for control group and on the commencement of lent for experimental groupone and two subjects at the same time morning between 07:00 and 9:30.

Datafor all three groups were recorded three times, eve of great holy lent, in the middle of the great holy lent and end of the great holy lent. The data obtained in the middle of the great holy lent was not computed for analysis purpose it was only served to observe the progress, however; only the initial and final data were used for analysis purpose.All the necessary measurement protocol was done according to thebioelectrical impedance analyzer manual procedure.

Exercise Training Intervention

The exercise program for experimental group one (Exp.G-1) subjects wasdesignedon the bases of (ACSM, 2009a and 1998) (Fat Burning Zone: 60-70% and Aerobic Zone: 70-80%) with a frequency of 3-d.wk^{-1} and duration of atleast 150 minutes per week.Up on this scientific background, Exp.G-1 subjects underwent 8-weeks (56-days) of aerobic and selected calisthenics exercise like push-ups, pull-ups, squats and sit-ups.The exercise training programs were closely supervised by a certified fitness trainer and community service provider.

Statistical Analyses

The data collected was analyzed by using Statistical Program Package for Social Sciences (SPSS) version 15.0. Descriptive statistics was performed to obtain mean and standard deviation.

Differences between groups at baseline were tested by independent samples t-test. Within-group changes begins from pre-test to post test were computed by a paired t-test. Between group differences were tested by an independent samples t-test. The result was followed by Post Hoc Tests of Scheffefor Multiple Comparisons of both means and significance difference among groups comparisons were performed when significant *F*-ratios were found. P-values of < 0.05 were considered significant.

Results

As it was mentioned above in the current study three different groups (Exp.G-1, n=27; Exp.G-2, n=25 and Cont.G-3, n= 20)were successfully completed the intervention.

The result was depicted below in the following different tables. The 1st table shows body composition descriptive statistics of the three groups' both the pre and post test results. The 2nd table indicates paired sample test of the three groups. Table-3 and 4 indicates-ANOVA- Post Hoc Test Multiple Comparison across the group at baseline and end of the study program.

Table-1 Prevs.Post-test DescriptiveStatistics ofthe Study Subjects,M ± SD

Variables (n=27)(n=25) (n=20)	Pre vs.post-test	Exp.G-1	Exp.G-2	Cont.G-3
Age	Pre	42.96 (±4.3)	40.96 (±4.49)	40.90(± 4.2)
	Post	42.96 (±4.3)	40.96 (±4.49)	40.90(± 4.2)
Height	Pre	1.73 (±0.66)	1.70(±0.07)	1.72 (0.03)
	Post	1.73 (±0.66)	1.70(±0.07)	1.72 (0.03)
Weight	Pre	84.0(±5.2)	81.88 (±9.3)	84.16 (±10)
	Post	80.65(±5.1)	81.7(±9.37)	83.89(±10)
BMI	Pre	28.43 (±2.85)	28.51(±2.95)	28.19 (2.67)
	Post	27.78(±2.65)	28.04(±2.92)	28.05(2.76)
Body fat (%)	Pre	31.74(±4.05)	31.47(±4.09)	31.57(4.22)
	Post	29.68(±4.01)	30.00(±4.20)	31.48(4.28)
Fat free mass (%)	Pre	28.09(±1.8)	28.06(±1.76)	27.97(±1.79)
	Post	28.67(±1.7)	27.97(±1.74)	27.82(±1.75)
Visceral Fat (%)	Pre	15.59(±3.8)	15.48(±3.92)	15.60 (±4.24)
	Post	13.8(±3.6)	15.28(±3.84)	15.82 (±4.15)

Key: *Exp.G-1 = Experimental group one, Exp.G-2 =Experimental group two, Cont.G-3= control group.*

Table-1 clearly depicted thedescriptive statistics of all variables considered under the study. Even though data was gathered three times (beginning of the study, middle of the study and end of the intervention), the data which was gathered at the middle was not computed, however; it was used to follow the progress which was caused by impact of the intervention on the participant.

Table-2:Paired Sample test of the Three Groups

Groups	Pre Vs post-test	Mean	SD	SMD	CI Lower	CI Upper	t	Df	P-value
Exp.G-1	Pair 1 Weight (kg)	3.44	1.54	0.29	2.831	4.057	11.55	26	.000
	Pair 2 BMI(kg/m2)	2.65	2.36	0.45	1.71	3.58	5.82	26	.000
	Pair 3 Body fat (%)	2.06	0.79	0.15	1.751	2.38	13.49	26	.000
	Pair 4 Fat Free mass (%)	0.23	.064	.012	-1.003	-.952	-79.3	26	.066
	Pair 5Visceral mass (%)	1.70	0.823	0.158	1.377	2.029	10.75	26	.000
Exp.G-2	Pair 1 Weight (kg)	o.181	0.25	0.048	0.081	0.28	3.73	24	0.001
	Pair 2 BMI(kg/m2)	0.437	0.288	0.55	0.329	0.55	26	24	0.000
	Pair 3 Body fat (%)	1.41	2.72	0.57	0.33	2.49	2.70	24	0.012
	Pair 4 Fat Free mass (%)	0.122	0.34	0.065	-.013	0.257	1.85	24	0.001
	Pair 5 Visceral mass (%)	0.25	0.52	0.10	0.05	0.46	2.56	24	0.017
Cont.G-3	Pair 1 Weight (kg)	0.27	0.73	0.164	-.073	0.613	1.643	19	0.117
	Pair 2 BMI(kg/m2)	0.145	0.245	0.055	0.029	0.260	2.63	19	0.116
	Pair 3 Body fat (%)	0.09	0.20	0.04	-.004	0.184	1	19	0.061
	Pair 4 Fat Free mass (%)	0.145	0.31	0.07	-.003	0.29	2.04	19	0.075

	Pair 5	Visceral mass (%)	-.225	0.412	0.092	-.418	-.031	-2.43	19	0.066

*** Significant difference (P < 0.05)*

Key; *BF= Body fat (%), FFM = Fat free mass (%), VSF= Visceral Fat (%); ^{S}MD=standard error of the mean difference; SD= Standard deviation; CI= Confidence interval at 95%*

Table-2 indicated paired sample test. This test clearly showed the pre-post test mean difference, standard deviation, standard error, confidence interval at 95%, the t-value,the number of degrees of freedom (df) and its significant level, i.e whether significant change was obtained or not within the group.

As it is depicted in the above table, Exp.G-1 subjects,who underwent for both intervention (structured aerobic exercise and great leant) was observed to lossitsbody weight, BMI, percent body fat, and visceral fat during the study period and the change was statistically significant ($p < 0.05$), however; surprisingly the FFM did not either increase or decrease rather it showed no change, i.e. this group of subjects preserved it since the P-value ($p > 0.05$) which is statistically not significant. In this finding it was possible to observe the positive influence of exercise on FFM and the remaining body composition variables.

Exp.G-2 subjects (who received only one intervention i.e great leant) as indicated in table-2 showed decrement of all five variables and has a p-value of ($p < 0.05$) which is statistically significant.

The control group of subjects (Ex.G-3)did not show any significant changes which has a p-value of ($p >0.05$) in all variables. Their life pattern did not either bring significant weight gain or loss, they simple maintain uniformly throughout the study period.

Table-3 ANOVA- Post Hoc Test Multiple Comparisonof the three variables atBaseline

Variable	(I) Groups	(J) Groups	Mean difference (I-J)	St. Error	Sig.
Weight	Exp.G-1 VS.	Exp.G-2	2.2123	3.10846	.777
	Exp.G-1 VS.	Cont.G-3	-.06370	3.3040	1.000
	Exp.G-2 VS.	Cont.G-3	2.27600	3.35	.796
Body fat (%)	Exp.G-1 VS.	Exp.G-2	.27617	1.14295	.971
	Exp.G-1 VS.	Cont.G-3	.17315	1.21487	.990
	Exp.G-2 VS.	Cont.G-3	.10300	1.23538	.997
Fat free mass (%)	Exp.G-1 VS.	Exp.G-2	.03230	.49959	.998
	Exp.G-1 VS.	Cont.G-3	.12630	.53152	.972
	Exp.G-2 VS.	Cont.G-3	.09400	.53999	.985

Significant difference (P < 0.05)

Table-3 indicates the three variables across the groups at the baseline. The one-way ANOVA result shows that, subjects across the groups had small differences at the beginning, however; this difference was not obtained to be significant ($p >0.05$).

Table-4 ANOVA- Post Hoc Test Multiple Comparison of the three variables at post-test

Variable	(I) Groups	(J) Groups	Mean difference (I-J)	St. Error	Sig.
Weight	Exp.G-1 VS.	Exp.G-2	-.1.05615	3.11274	.944
	Exp.G-1 VS.	Cont.G-3	-3.23815	3.30860	.031
	Exp.G-2 VS.	Cont.G-3	-2.18200	3.36445	.041
Body fat (%)	Exp.G-1 VS.	Exp.G-2	-.31852	1.15349	.963
	Exp.G-1 VS.	Cont.G-3	-1.80352	1.22607	.034
	Exp.G-2 VS.	Cont.G-3	-1.48500	1.24677	.049
Fat free mass (%)	Exp.G-1 VS.	Exp.G-2	1.10207	.49031	.043
	Exp.G-1 VS.	Cont.G-3	1.24907	.52116	.063
	Exp.G-2 VS.	Cont.G-3	.14700	.52995	.035

Significant difference (P < 0.05)

As it was depicted in table-3,the baseline or pre-test results across groups indicated absence of significant changes, however; table-4 indicated the existence of some variability at the end of the intervention among the groups.

Discussion

The finding obtained in this study particularly the impact of the strength training intervention has great association with McArdle, Katch&Katch (1996) and Wilmore &Costill, (1999) studies. Similarly Fahey,

Insel& Roth (2005) and Anspaugh, Hamrick &Rosato (2001) elucidated that Strengthtraining improves body composition by increasing muscle mass, there by tipping the body composition ratio toward fat-free mass and away from fat. Build muscle mass through strength training also helps with losing fat because basal metabolic rate (BMR) is related to muscle mass, the more muscle mass, the higher the metabolic rate. Strength training can boost resting metabolic rate by 0-15%, depending on how hard one train. Therefore, inclusions of any type of calisthenics exercise, which have the characteristics of resistance exercise, have positive effect on the FFM.Trepanowski& Bloomer, (2010) studied the impact of religious fasting on human health. The result of their study revealed a changes in anthropometry, body composition, and biochemical variables. Regarding to body composition variables strong association was found between the current study and Trepanowski& Bloomer findings.In another study,Mahroof et.al, (2007)reported the physiological changes that occurred during fasting period which was also the result finding of the current study.

Conclusions

In conclusion,in this modern era, obesity and overweight becomes the major health problem in the world. In the present study, bothinterventions (great lent aloneand when itwas combinedwith structured aerobic exercise)shows great changes in lean and fat tissue. Therefore,it was found that both intervention are the best approach in body weight management for overweight individuals, however; the combined approach is much more effective than either of the two typessince it maintain the free fat mass of the subjects.

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Soccer Violence: Factors And Tackling Mechanism In The Case Of Ethiopia Premier League (Epl)

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Abstract
In Ethiopia, soccer violence was sporadic, however; these days, it is becoming a growing concern and it extended even outside the stadium.Spectatorsare reserved to go stadiums in afraid of violence related injuries, the violence damaging the sociocultural values of the country, and it also affects the image and development of football as a whole.Despite this, studies were scanty and not properly done. Thus, the purpose of this study was to examine the causes and it's tackling strategies.A cross-sectional descriptive study was conducted among 137 potential respondentssince 1st of January2016 to31 of October, 2017 using snow ball and stratified random sampling for the qualitative and quantitative data respectively. The interview was analyzedqualitatively while SPSS version 17 software was applied as a statistical tool for the analysis of quantitative data.The findingsrevealed that the chieffactorsof spectator violence were found to be multifaceted, however;the root cause emergedfrom players; referees; coaches, spectators; clubs fans, football federation; clubs managers; the mediabodies andquality of stadiums.As a means of tackling mechanism the best remedies are discussing the problems with the stakeholders;awareness creationandsustainable education of the communities; strict punishment policy followed by execution of the law are the major ones besides to identifying the most active place of violence, traditionally named as "Katanga". In conclusion,there is a need to take serious and feasible actionon how to curb the problem and how to ensure sustainable and peaceful tournamentsbefore it traumatizing the sport families. The federation should improve also to the quality of stadiumsusing CCTV and good fence and pay attentionon proactive strategies like education as a big weapon than focusing on reactive measure.
KEYWORDS: Violence, fans behavior, CCTV, potential respondents.

Introduction
Soccer violence is the term used to describe disorderly, violent or destructive behavior of spectators at a football event, the conflict may take place during or after matches.In soccer, violence is a competitive behavior of socially organized fan groups, principally directed against opposing fan groups (Spaaij, 2006; Lussier& Kimball, 2014).

In Ethiopia, soccer violence was sporadic, however; these days, it is becoming a growing concern and it extended even outside the stadium. The remarkable violence, for example,wasoccurred between St. George and Adama City at Addis Ababa Stadium, in April, 2016; the other distressing violence between the Dashin Brewery and Ethiopia Coffee at Gondar stadium in May, 2016; the thirdand a painful violence between Ethiopia Coffee and Hawasa City at Addis Ababa Stadium in June 10, 2016 and the fourth violencein which heavy injuries were recorded at the 12th Addis Ababa City Cup Final match that was held on October 22, 2017 between St. George FC and Ethiopia Coffee FC.
Therefore; the purpose of this study was to examine the major factors and it's tackling mechanism of spectator violence,upon the aforementionedheartbreaking violence which had put unforgettable scares on the heart of the Ethiopian soccer community.

Methodology

A cross-sectional descriptive survey with mixed method of quantitative and qualitative research design was conducted.

Subjects

The composition of the potential respondents were identified purposely from various groups of the society such as soccer federation officials; players, coaches, club supporters (fans) ; clubs administrative staffs; police officers; sport journalists; international referees; professional sport persons like match commissioners and sport science instructors etc., To keep the heterogeneity of 360 initially identified potential respondents, from each stratum, the participants were reduced to 120through stratified random sampling procedures. Another 17 resourceful interviewees were selected through snow-ball method.

DATA GATHERING TOOLS:-

A five-level Likert item questionnaire and a face-to-face interview were applied besides to collecting a photograph documents.

TECHNIQUE OF DATA ANALYSIS:-

Data was analyzed both quantitatively and qualitatively. The quantitative data was done by SPSS version-15 software; whereas Data of the interview was analyzed in qualitatively approach.

Results And Discussion:-

This section of the study depicted the factors and tackling strategiesresultobtained from respondents and interviewees:-

Result obtained fromrespondents using Likert scale as questionnaires:

Table-1:In Ethiopia, these days, spectator violence is growing?

Items	Valid	Frequency	Percent	Mode	SD
#-1	Not sure	8	6.7		
	Agree	19	15.8		
	Strongly Agree	93	77.5	5.00	.585
	Total	120	100.0		

The above table clearly depicted the existence of the problem (spectator violence) in Ethiopia premier league match. This initial result is a good indicator for the current study and which is also supported by the pictures illustrated below.

The Picture below shows the match held b/n Ethiopia Coffee and Hawasa at Hawasa City at reginal stadium(Gondar).

Source: **The Ethiopian Herald Vol. LXXII No 201 May 2016;

***This incidence occurred on October 22, 2017 between St. George FC and Ethiopia Coffee FC, at the 12th Addis Ababa City Cup Final. According to the reporter news 39 spectators were seriously injured, where 9 of them were still under critical conditions (right pic.). *The picture on the left side indicated the incidence occurred during the match held b/n Dashin Beer and Ethiopia Coffee.*
Source:**The Reporter English News 15 Oct, 2016 &Vol. XXII No. 1103 and *October 28, 2017. (*From left to right*)

Major Factors
Table: 2 Factors of Spectator Violence obtained from Likert scale Questionnaire

Items	5		4		3		2		1			
	∫	%	∫	%	∫	%	∫	%	∫	%	Mode	SD
Item # 2	9	7.5	19	15.8	12	10	45	37.5	35	29.2	2.00	1.26
Item # 3	-	-	21	17.4	5	4.1	65	53.7	29	24	2.00	0.98
Item # 4	56	46.3	38	31.4	26	21.5	-	-	-	-	5	0.79
Item # 5	74	59.2	44	35.2	2	1.6	-	-	-	-	5	0.527
Item # 6	38	31.4	54	44.6	15	12.4	13	10.7	-	-	4	0.93
Item # 7	29	24.0	69	57.0	14	11.6	8	6.6	-	-	4	0.79
Item # 8	54	44.6	47	38.8	2	1.7	17	14.0	-	-	5	1.00
Item # 9	-	-	23	19.2	4	3.3	33	27.5	60	50.0	1	1.14
Item # 10	-	-	15	12.5	10	8.3	43	35.8	52	43.3	1	1.00

Key: 5= strongly agree; 4= agree; 3= not sure; 2= disagree and 1= strongly disagree.
*Item # 2: players show fair play? Item # 3: Coaches' show ethical behavior during the match? Item # 4: spectators/fans drink alcohol when they entered to the match..? Item # 5: Most spectators/fans don't know well the rule of the game...?*Item # 6: Spectators violence steamed from frustration in thinking of loss of points? Item # 7: Spectators violence is a learned social behavior? Item # 8: Referees have different type of problems. Item # 9 most stadiums of the country fulfill the standard. Item # 10, the soccer federation discharges its legal duty and responsibility to avoid spectator violence. As indicated in the above table-2, lack of fair play, spectators' unethical behavior(use of vulgar language),alcohol consumption and and soccer federation default of its responsibility is one of the factors for spectator violence. The result of the present study are associated with the finding of the other studies. For example Terry& Jackson, (1985) explained that Punishing aggression severely enough to deter further aggressive behaviour, combined with substantial rewards for fair play.The other most important factor is frustration of players in loss of points. This finding is supported by the most prevalent fan violence theories include instinct theory, frustration–aggression theory, and hooligan addiction theory also supported the current study (R.E. Ward 2002).

Tackling Mechanism

Table: 3. Tackling Mechanism of Spectator Violence obtained from Likert scale.

Key: 5= strongly agree; 4= agree 3= not sure; 2= disagree and 1= strongly disagree

Items	5		4		3		2		1			
	f	%	f	%	f	%	f	%	f	%	Mode	SD
Item # 1	3	2.5	38	31.4	5	4.1	42	34.7	31	25.6	2	2.17
Item # 2	-	-	-	-	-	-	40	33.1	80	66.1	1	0.47
Item # 3	25	20.7	66	54.5	-	-	29	24.0	4	3.3	4	1.05
Item # 4	46	38.0	41	33.9	10	8.3	19	15.7	4	3.3	5	1.18
Item # 5	9	7.4	48	39.7	10	8.3	45	37.2	8	6.6	4	1.6
Item # 6	11	9.2	50	41.7	16	13.3	23	19.2	20	16.7	4	1.28
Item # 7	13	10.7	22	18.2	10	8.3	46	38.0	29	24.0	2	1.32
Item # 8	12	9.9	21	17.4	7	5.8	38	31.4	42	34.7	1	1.3

Key:-

Item # 1, if high-risk match is suspected the federation changes immediately another stadium; Item # 2 Stadiums have CCTV (closed-circuit Television); Item # 3, Security polices checks systematically spectators pockets and bags; Item # 4, the police punish the violators in a dangerous way; Item # 5, the police force focuses on proactive measure than reactive; Item # 6 when fans involve in violent action, the federation penalized the violators ; Item # 7, the types and intensity of penalty given by the federation on the violators are well-matched; Item # 8, the media discharges its legal duty and responsibility.

Interview Result:-

Factors of spectator Violence

The finding, based on thorough analysis of the interview was summarized as follows:-

Question: In your opinion, what do you think about the major factors that triggeror lead spectators/fansto the action of violence while watching football during premier league match?

Answer: the interviewees listed various problems, however; the key factors are focusing on: - lack of fair play; players, coaches and fans were very emotional and undisciplined.Some refereesdecision were not accurate and still partiality were also observed. Spectatorsdrank alcohol and they do not recognizing the rule perfectly, as a result they wrongly protesting referees decision; soccer federationpay no attention to formulate strict law and lazy fairness was observed to execute the law promptly ; clubs managers default of their won responsibility; players along with their fans did not accept their performances weaknessif they were excelled by their rivalry andsimilarly if fans were under tension and frustrationin loss of points, this situation drove the whole spectators to the action of violence; stadiums are not to the standard, even some of it do not have proper fences;mediabodies broadcasting biased and exaggerating news and even sometimes the unverified reports were directly released on air ; poor ticketing policy; were among the most and some of this finding were supported by(Dunning *et al*. 1988).

2.2. Spectator Violence tackling mechanism

Question:In your opinion, what tackling mechanism should be designed and done to tackle spectator violence?

Answer:The primary things is that educating the communities regularly to bring behavioral and holistic change.Secondly, the media should take its responsibility without any partiality and prejudiced. Thirdly, there should be strict penalty for those individuals, fans and clubs who violet and try to trigger violence action in one or another way like disseminating wrong information through social media. Fourthly, stadiums should be to the standard and CCTV should be installed, improve ticketing police. Madensen& Eck, (2008) strongly recommend that the major task is to devise strategies to reduce violence such as incorporating technology like CCTV (closed-circuit television) cameras and nonlethal weapons can be useful crowd-monitoring and control devices.Besides to this, the security should identify the most active place of the violence, i.e. “Katanga" which has a congested seat in the stadium and get this name traditionally by the spectators. Finally, the federation should create platforms like preparing national and international symposiums, workshop, conferences and seminar and effectively utilized the inputs in discussing with the stakeholders before the violence reach to unmanageable stage and devastate the economy of the country. Regarding to this, WHOreported that violence-related injuries cost the world community almost US$ 500 billion in medical care, sick pay and lost productivity every year (WHO, 1993; Quidt& Johnston, 2005).

Conclusions

Based on the findings of the study it was concluded that the root causes of spectator violence is multifaceted, therefore to curb the problem,soccer federation along with stakeholders, other institutions and pertinent individuals should discuss together and design feasible strategy to get ride the problem in a step-by-step manner.

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Sport Marketing Consulting Strategies And Tactics

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Abstract
Sport marketing academics have increasingly recognized the value of making their work more relevant to practitioners. However, there is little literature about specific strategies and tactics for academics to conduct research that will be of use to sport marketing practitioners. In this paper, I will suggest some strategies and tactics for sport marketing academics interested in identifying and pursuing consulting opportunities in the sport industry. Drawing on my experience as a sport marketing consultant, I suggest that academics seeking to work with practitioners should focus their attention on sponsorship sales support, marketing planning and sponsorship activation, and sponsorship and marketing evaluation.
Key Words: Applied research, sales support, marketing planning, and sponsorship evaluation.

Identifying prospective clients

Sport marketing research is a tough sell. Sport properties conduct much less research than comparably sized businesses in other categories and rarely have a dedicated research budget or professional research staff. Among corporate sponsors, sponsorship-related research expenditures have not kept pace with the increased focus on return on investment (ROI). As an industry –both academic researchers and sport-related private sector market researchers– we have failed in large part to effectively communicate the benefits of research to sport marketing practitioners. Consequently, the onus is on sport marketing academics to demonstrate the value of research to practitioners. In order to forge more partnerships between academic endeavours and industry practitioners, sport marketing academics need to practice what they teach. That means starting with identifying the needs and wants of potential clients.

Marketing Practitioners as Clients:

Since only a handful of sport properties employ even one full-time researcher, research vendors frequently must approach marketers to sell their services. Even in very large corporate sponsors that have market research departments, the client usually comes from the marketing, sponsorship, or public relations arm of the corporation. Research efforts are often coordinated and/or approved by the market research department of the corporate sponsor but the department handling the sponsorship almost always pays the fee.

Practitioner Needs and Wants. Even a casual perusal of the sport and sponsorship industry trade press results in the identification of a range of problems facing marketing practitioners. There are larger strategic problems, such as the aging fan bases for major professional sports or calculating return on sponsorship investments for sport sponsors. And there are more tactical problems, such as the best starting time for a Sunday game or whether a sponsor should pursue a league-wide or an individual team sponsorship within a particular sport.

For example, the timely identification of a shared need among NASCAR Sponsors resulted in the NASCAR Sponsorship Study out of James Madison University's Centre for Sports Sponsorship. In the past couple of years, costs have spiralled for NASCAR sponsorships. NASCAR sponsors have become increasingly concerned about rising costs amid challenging economic circumstances. Some sponsors left NASCAR altogether; others significantly downsized their relationships. However, many sponsors simply reacted to the «sticker shock» instead of rigorously analyzing the value these relationships delivered.

The specific circumstances surrounding NASCAR dovetailed with a broader increased demand for evidence of ROI. Sponsors need empirical support but customized research on low incidence populations such as NASCAR fans can easily run into a six-figure fee from a private market research company. In an effort to create a more affordable research tool for NASCAR sponsors, the staff at the centre for Sports Sponsorship developed the NASCAR Sponsorship Study based on a syndicated market research report model and successfully sold the study to sponsors Gatorade, UPS, the Home Depot, and ESPN.

Sales Strategy:

Researchers often misconceive what it is they are selling, frequently making the mistake of selling the «study» (i.e., the data collection, the report, etc.) instead of the benefits of the study. Clients buy the solutions to their problems, not the data. Therefore, successful research sales must emphasize the benefits of research, not the data collection methods or data analysis procedures. While research studies of course need to be customized to individual clients, each of the market research reports I have authored for sport industry clients falls into a typology of benefits. Sport properties (e.g., teams, leagues, etc.) use research primarily for sales support, but also for strategic planning and program justification). Sport sponsors use research primarily for sponsorship evaluation and program justification, but also for strategic planning.

Sales Support for Sport Properties:

The biggest challenge in selling research is that it is always at least one step removed from creating revenue for the organization. Since marketers are primarily concerned with creating revenue, they seek ways to translate research into streams of revenue, the most common of which is sponsorship. Sport marketers need to demonstrate their value to prospective sponsors. Research can help by providing evidence of an attractive audience.

For example, audience demographics can be indexed to local and/or national populations to demonstrate appealing characteristics such as affluence and youth. Researchers can measure product usage in selected categories to identify potentially fertile markets. But researchers can and should go beyond basic demographics and product usage. Researchers can identify the «it» associated with the property, a brand association with which sponsors would be interested in linking their brands and companies. Sponsorship proposals are more effective when assertions are supported by empirical data, especially when the data are customized to a specific prospect.

Research can also be used to assist in renewals of existing sponsors. As part of the general trend toward evidence of ROI, sponsors seek more sophisticated and rigorous sponsorship fulfilment reports. Researchers can play an integral role in the production of sponsorship fulfilment reports because of their command of audience characteristics and sponsorship performance. A convincing fulfilment report wills likely lead to higher renewal rates. In addition, sport properties can use evidence of sponsorship performance to negotiate more favourable sponsorship contracts. Or, if the evidence points in the other direction, a property can use the research results to create a sponsorship package that would be more suitable to the sponsor. It is better to have a reduced relationship with a sponsor than none at all, which would be the case if sponsorship costs continued to outweigh benefits delivered. Beyond specific cases, sport marketing academics are positioned to play an important role in promoting the disciplines of sponsorship and sport marketing as a whole. While advertising and public relations professionals each have professional associations promoting their respective disciplines, sponsorship and sport marketing executives do not. As a credible and independent third party, the sport marketing academy can provide support for the overall effectiveness of these disciplines in the larger marketing and business communities.

Strategic Planning:

Sport marketing practitioners are primarily concerned with tactical marketing issues, such as deciding how best to allocate their limited marketing resources. It’s a zero sum game. If a sport marketer hires more sales representatives that reduces the advertising budget. Researchers can provide guidance for specific tactical questions, such as when to start a Sunday game or how many sales representatives should be hired. While the emphasis is on tactical decisions, many practitioners are also interested in broader strategic questions. The difference between academic interests in theory and practitioner interest in practice is one of intensity; it is not a categorical difference.

Benefits to Sport Sponsors:

Sponsorship Evaluation:

Clearly, sponsors are asking for demonstrable ROI with increasing frequency and intensity. While a direct link to sales is elusive other than in situations where a sales element is integrated into the relationship (e.g., on-site retail presence), researchers can deliver measures of effectiveness and efficiency. At the end of the day, however, sponsors want to know if the relationships in question are working, or if their marketing dollars are better spent elsewhere. It is helpful to practitioners for researchers to design studies in order to draw conclusions about the sponsorship's performance. It is often helpful to draw comparisons to other marketing communications, especially advertising, because it is frequently the biggest line item in marketing budgets. Researchers can provide competitive intelligence to sport sponsors by measuring competitors' sponsorship performance and brand positioning, thereby identifying areas sponsors can avoid or should put resources behind.

Conclusion:

Strategic planning for sponsorship usually flows out of evaluation reports. Of the scores of sponsorship evaluations for corporate clients I have personally conducted, only one was designed for strategic plan.

Pricing Strategies:

Be aggressive in pricing:

Clients could be billed by service. Data analysis and report writing have a higher value than data entry and report production, even if the same person does the work. Weiss (2000) recommended that consultants pursue value-based pricing instead of hourly billing. However, since revenue is not directly derived from research efforts, a final «value» is difficult to estimate.

Draw clear, concise:

Sport marketing practitioners are not interested in plowing through the data. They are interested in «what the research says.» Researchers need to state conclusions drawn from the study.

For example, «the audience has very desirable demographics» is simple but can be used as a sales tool. Conclusions should be stated at the beginning of the report in an executive summary, which is the most important part of the report. Keep the methods section brief or include it as an appendix. **Keep statistics simple.** Unless a client otherwise requests, stick to frequencies and crosstabs. While multivariate statistical analysis is often valuable in identifying relationships, and therefore very useful in analyzing results, they should be included in reports judiciously so as to avoid confusing clients.

Maintaining and Building Industry Relationships:

Conducting market research for sport marketing practitioners can be an effective method in establishing relationships with the industry but it can also lead to other consulting opportunities in areas such as proposal preparation and conducting sales campaigns.

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A Study On Effect Of Aqua Aerobics Exercises For Development Of Endurance During The Summer Season Among Athletes

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Abstract
The aim of the present study was to study the effects of Aqua Aerobics Exercises during hot weather in Athletes. The 40 Male Long distance Athletes between the age group of 18 to 24 years i.e. 20 Experimental and 20 Control group were taken for the study. The 6 weeks aqua aerobic exercises for experimental group were given on alternate days at S.S&N College Swimming Pool, Narasaraopet and controlled group were given the general training. The Pre and Post Training 12 Run Cooper Test were used to evaluate the effects of Aqua Aerobics Exercises during the Summer Season among experimental and controlled group. The Study shows that the Aqua Aerobic Exercises are very good for development of endurance among athletes.Keywords-Athletes, Aqua Aerobic Exercises, summer, endurance

Introduction

The When training in hot weather, it's likely that you feel more sluggish. This is because your body regulates your activity level based on its ability to keep itself cool. However, whether this heat based fatigue is a reactionary event once a critical core temperature is reached around 40 degree Celsius. Excess heat generated during exercise is carried to the skin where it is lost via radiation, conduction, convection and evaporation.When nude and at rest,60% of the body total heat loss comes from radiating heat in the form of infrared rays. Conduction is the transfer of heat from one object to another along a temperature gradient. In air, this account for only about 3 % of the body heat loss, but becomes more important when exercising in water because water is a far more efficient heat conductor. Convection is what makes us feel cooler on a windy day.

Heat cramps, Heat exhaustion and Heat stroke are all signs of the body's in ability to cope with the heat stress of the environment. When the environmental heat load is great, the body attempts to cool itself further by sweating more. When the fluid lost from sweating is not replaced dehydration results. Signs of heat exhaustion include excessive sweating, complaints of weakness, dizziness, thirst, nausea or fainting. Treatment in the field includes rest in a shaded area, cooling with water soaked towels and rehydration with energy drinks. Heat stroke results when the body can no longer handle the heat load and the core temperature begins to rise above 40 * Celsius. Early signs of heat stroke include disorientation and memory loss.

Aqua Aerobics also referred to as water aerobics in one of the most effective method to train the long distance athletes during summer for avoiding hot weather related problems. Water exercises is rapidly growing in popularity. Exercise enthusiasts, athlete, elderly and physically challenged are discovering aquatic exercise programs that suit fitness. An advantage of Aqua Aerobic exercise is that it can involve the upper and lower extremities through optimal ranges of motion while minimizing joint stress. Aerobic exercise is any physical activity that boosts heart rate, induces deep breathing and increases the amount of oxygenated blood in the body. Water Aerobics is a low impact aerobic exercise that's easy on bones, joint and muscles, making it safe for almost any one. Water Aerobics is especially beneficial for older or overweight people, or those recovering from injury or undergoing physical therapy.

Advantages of Aqua Aerobics:
Provides Buoyancy and support.Quick Muscular Endurance.Improved Flexibility
Improve Cardio Vascular conditioning.Helps Keep CoolBurn Calories

Methodology & Tools Implemented

AcceptedTo find out the effects of Aqua Aerobic Exercise during Hot Weather for development of Endurance among Male long distance athletes in Hyderabad.
The sample for present study is 40 Long Distance Athletes from Guntur District. The Experimental group is 20 Male Long Distance Athletes and Controlled group will be 20 Male long distance athletes.
12 Minute Cooper Test is used for collection of Data.

Data Analysis & Procedure

The 12 Minute Cooper Test were used for Pre Test for Experimental group and Controlled group and results was recorded. The Six Weeks training were given to Experimental Group which consists of Water Aerobic Exercises on alternate days in the morning session with water up to waist level.
The following are the important Aqua Aerobic Exercises given to athletes.
1. Walking in Water2. Running in Water3. High Knee action running in water.4. Leg kicking in Water.5. Arms Exercises.6. Aerobic Exercises with Dumbells.

Data Analysis & Results

The Experimental group athlete Mean in Pre Test is 3,440 Meters and Post Test Mean is 3720 Meters there is a improvement of 280 Meters in six weeks training of Aqua Aerobic Exercises in Swimming Pool. The Controlled group athlete in Pre Test is 3340 Meters and Post Test is 3300 Meters and there is reduction in performance up to 40 Meters.

Pre Test(Mtrs) Results of 12 min Cooper Test	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Experimental Group	20	3440.00	219.71	49.13	1.69453	38.00	0.10
Controlled Group	20	3340.00	137.71	30.79			
Post Test(Mtrs) Results of 12 min Cooper Test	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Experimental Group	20	3720.50	238.89	53.42	6.440721	38.00	0.00
Controlled Group	20	3300.00	167.87	37.54			

Table.1: showing the Mean, S.D.Values obtained by Experimental and Controlled Groups of Pre-test and Post Test.

Conclusion

It is recommended that Aqua Aerobic Exercises is good to train athletes in Summer Season. It is recommended that Aqua Aerobic Exercises is good for rehabilitation, Old people and Overweight people.

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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,Flexibility
PHYSIOLOGICAL VARIABLES
Blood Pressure ,Systolic blood Pressure,Diastolic blood Pressure,Resting Pulse Rate
Resting Respiratory Rate

Methodology

Selection Of Subjects

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.

Selction 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.

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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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The international physical education there are follow to rules and regulation with Indian constitutional law

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Abstract:
Physical education is most important to each and every student Evaluating students performance in any school course, including physical education, is a very controversial issue. There are no perfect solutions that could be universally applied in every school, every social background and with respect to every single student. Social science literature provides a rich body of various but incoherent information about monitoring students, progress, evaluating their performance and measuring teaching results. While evaluating is not the most important aspect of education, it is surely a crucial link in teaching and learning processes, marking the final stage of each education task This paper is an attempt at analyzing difficulty layered monitoring and evaluating measures taken by physical education teachers. Furthermore, the paper define the status of these measures ad their psycho-social preconditions. It also presents a modern approach to the evaluation of performance of students of key participants of the education process The survey included physical education teachers holding full professional qualifications, employed in primary, grammar and secondary school in questionnaire related to monitoring and evaluation measures taken by teachers, a questionnaires including and international Reactivity index a question testing the teachers communications styles and teaching process management ways, and finally a temperament questionnaire.Also examine were physical education teacher from randomly selected schools in primary schools, grammar school and secondary schools,. Teachers were tested, including female and males. The examination was made by observation physical education classes were visited

Introduction:
The physical educational is mostly important to the students and teachers Regular physical activity participation throughout chidlhoold provides immediate health benefits, by positive body composition and muscle-skeletal development and reducing the presence of coronary heart diseases risk factors of in recognition of these health benefit, physical activity guidelines for children and youth have been developed by the health education authority health. Development agency the primary recommendation advocates the accumulation of hours physical activity per day of at 1 hour physical activity at least per one day modern intensity the equivalent of bricks walking through lifestyle, recreational and structured activity forms. A secondary recommendation is that children take part in activity that help develop and maintain health and on at least two occasion per week This is target many be activity that focus on developing muscular strength, endurance and flexibility, and bone health.

School physical education provides a context for regular and structured physical activity participation To this end a common justification for a physical education place in the school curriculum is that it contribution to children health and fitness the physical education is the most important to the each and every man ever people must to the need of the fitness of the health them.

Important role that physical education has in promoting health –enhancing to the physical activity is example of the us the health of the nations target These includes three physical educational association objectives, These including the numbers of schools providing to the physical educations to the people and the students musts to the improving the physical education to hole of the including to the teachers and students

How of the challenges ever, research evidence suggests that this critical is somewhat ambitious and as a consequence is rarely achieved during regular physical educations the difficulties of achieved such a target are associated with the diverse aims of physical educations throughout the world.

Academic achievement

In addition proving to the in any other country and the other any fitness is the most important to the in us each and every person to the must to the nee of the health and then the man can do the anything to the works the academics of benefits are apparent two of the challenges of the that school district are faced with while trying to improving physical activity in the society an each and every man must to proved to the physical education and mainly the main the explanations to the this type of the physical education and the then the ours physical education and health is also to improving the ours society this is the ours academics of the achievements

Revised International charter of physical Education, Physical Activity and Sports

Preamble:

The General Conference of UNESCO,

Recalling that in the character of the United Nations the people proclaimed their faith in fundamental human rights and in the dignity an worth of the hymen person and affirmed their determination to promote social programs and better standers of life,

Recalling that by the terms of the Universal Declaration of the human rights every is entitled to all the rights and freedoms set forth therein without discrimination of any kind, such as to race color, sex, language religions political or other opinion, national or social origin property, birth or other status.

Proclamation this international charters that puts physical education, physical activity and sports at the service of human development, and urges everyone, especially governments, international organization, sports organization for reality of the all the governments principles can be became a reality for all human beings

The International Physical Education There Are Follow To Rules And Regulation With The Indian Constitutional Law With No Descrimination Of The Any Human Beings

Ariticle:1:The practice of physical education, physical activity and sport is a fundamental right for all

Every human beings has fundamental rights to the physical education activity and without the discrimination to the on the basis of humanity ethics gender color

Sex language place of birth regions political and the others of the any no discrimination

Article:2

Physical education, physical and sports can a wider range of benefits to individuals communities and society at large

The mainly to the explains to the no individuals and no to the discrimination to the any o f the peoples and any race sex language religions and caste political there are mostly to incarnates to the each and every person and the everybody this is the main themes

Article:3

All the stakeholders must a participate in creating to a strategic vision identification policy options and priorities

All of the students there are don't discrimination to person and given to the all students opportunity

Article:4

Physical education and physical activity and programmers must inspire lifelong participation

Article:5

All stakeholders must ensure that their activities are economically socially and environmental sustainable

Article:6

Research, evidence, and evaluation are indispensible components for the development of the physical education physical activity and sports.

Conclusion:

The mainly conclusion of the this article they are most important of the mainly to improve our physical and health and mentally fitness are no discriminations to any of the peoples and no encourages individuals persons this is the most important to the our international and Indian government.

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Influence Of Battle Rope Training On Selected Physiological Variables Among Male Volleyball Players

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Abstract

The purpose of the study was to find out the influence of battle rope training on selected physiological variables among male volleyball players. To achieve the purpose of the study twenty four male volleyball players have been randomly selected from various colleges in and around erode district in the state of Tamil Nadu, India. The age of subjects were ranged from 18 to 25 years. The subjects were randomly assigned into two groups of twelve each, such as experimental and control groups. The experimental group participated in the battle rope training for 3 days a week, one session per day and for 8 weeks each session lasted 45 minutes. The control group maintained their daily routine activities and no special training was given. The subjects of the two groups were tested on selected variables prior and immediately after the training period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to find out the significance difference, if any between the groups. The 0.05 level of confidence was fixed to test the level of significance difference, if any between groups. The results of the study showed that there was significant differences exist between battle rope training group and control group. And also battle rope training group showed significant improvement on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation compared to control group.

Key words: battle rope training, vital capacity, slow vital capacity,

Introduction

The Battling Ropes System was created and developed by John Brookfield. John is a multiple world record holder and the author of the popular book, Mastery of Hand Strength. Battle ropes are commonly used as a high intensity interval training (HIIT) tool to develop an athlete's strength, power, explosiveness, as well as their anaerobic and aerobic endurance. Battling Ropes or heavy rope training gives the entire body countless benefits. The great thing about training with the Battling Ropes is that movements and techniques can be modified for exercisers of just about any fitness level; from using both hands to grip and work only one end of the rope, to adding more advanced movements that include lower body movements along with the upper body work.

Recently, large diameter ropes (1-2 inches) weighing approximately 20 to 75 pounds called battling ropes have emerged as an alternative training apparatus for HIIT programs. Battling ropes are typically 40 to 50 feet in length and are anchored securely to the floor in the middle of the rope, creating two lengths of 20-25 ft. With knees slightly bent, the exerciser grasps the ends of the extended rope and moves his/her arms rapidly in an up and down motion with a vertical displacement of the rope. There are a number of exercises that can be done with battling ropes but two common motions are: both arms moving together called the "double whip" and both arms moving opposite to one another in the vertical plane called the "alternating whip"

One advantage of using battle ropes is the degree in which they can be progressed and regressed, via altering exercise selection (unilateral/bilateral limb movements), posture (i.e. standing, kneeling, sitting, prone, supine) and adding additional compound movements to the exercise (i.e. squats, lunges, hops, jumps, shuffles). Apart from exercise selection, exercise intensity is also dependent on rope

size, diameter and length, rest period and also the speed and amplitude of wave motion. Stanforth et al (2015) and Ratamess et al (2015).

Adam Linens (2015) opined that battle ropes are a great tool to help improve hand speed, grip strength, upper body strength & endurance, core strength & stability, and increase overall fitness level and conditioning. Using the ropes to perform basketball specific movements challenges the core to maintain good body position while completing the exercise, much like being bumped, grabbed, and fouled while playing the game.

Methodology

To achieve the purpose of the study twenty four male volleyball players have been randomly selected from various colleges in and around erode district in the state of Tamil Nadu, India. The age of subjects were ranged from 18 to 25 years. The subjects were randomly assigned into two groups of twelve each, such as experimental and control groups. The experimental group participated in the battle rope training for 3 days a week, one session per day and for 8 weeks each session lasted 45 minutes. The control group maintained their daily routine activities and no special training was given. The subjects of the two groups were tested on selected variables prior and immediately after the training period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to find out the significance difference, if any between the groups. The 0.05 level of confidence was fixed to test the level of significance difference, if any between groups.

TABLE-I:Criterion measures

S.No	Criterion measure	Test items	Unit of measurement
1	Vital capacity	Spirometer	In liters
2	Forced vital capacity		
3	Slow vital capacity		
4	Maximum voluntary ventilation		

TABLE – II:Descriptive Analysis Of Physiological Variables Among Experimental And Control Groups

S.No	Variables	Group	Pre-Test Mean	SD (±)	Post –Test Mean	SD (±)	Adjusted Mean
1	Vital capacity	BTG	2.75	0.07	3.10	0.01	3.11
		CG	2.72	0.02	2.96	0.19	2.95
2	Forced vital capacity	BTG	3.70	0.17	4.07	0.02	4.07
		CG	3.62	0.01	3.88	0.23	3.88
3	Slow vital capacity	BTG	2.86	0.19	3.13	0.05	3.13
		CG	2.80	0.11	3.00	0.20	3.00
4	Maximum voluntary ventilation	BTG	111.99	1.47	121.36	1.56	121.37
		CG	112.63	1.33	118.17	1.21	118.16

BTG = battle rope training group CG= Control group

The tables-II the pre, post-test means, standard deviations and adjusted means on physiological variables of male volley ball players were numerical presented. The analysis of covariance on selected variables of battle rope training group and control group is presented in table – III

TABLE – III:Computation Of Analysis Of Covariance On Physiological Variables Among Male Volley Ball Players

S.No	Variables	Test	Sum of variance	Sum of squares	df	Mean square	F ratio
1	Vital capacity	Pre-test	B.G.	0.007	1	0.007	2.31
			W.G.	0.06	22	0.003	
		Post-test	B.G.	0.13	1	0.13	6.84*
			W.G.	0.42	22	0.01	

		Adjusted means	B.S.	0.12	1	0.12	6.26*
			W.S.	0.42	21	0.02	
2	Forced vital capacity	Pre-test	B.G.	0.03	1	0.04	2.43
			W.G.	0.32	22	0.02	
		Post-test	B.G.	0.20	1	0.20	7.39*
			W.G.	0.62	22	0.02	
		Adjusted means	B.S.	0.18	1	0.18	6.24*
			W.S.	0.62	21	0.03	
3	Slow vital capacity	Pre-test	B.G.	0.02	1	0.02	0.84
			W.G.	0.55	22	0.02	
		Post-test	B.G.	0.11	1	0.11	5.30*
			W.G.	0.47	22	0.02	
		Adjusted means	B.S.	0.09	1	0.09	4.47*
			W.S.	0.46	21	0.02	
4	Maximum voluntary ventilation	Pre-test	B.G.	2.39	1	2.39	1.21
			W.G.	43.36	22	1.97	
		Post-test	B.G.	60.99	1	60.99	31.12*
			W.G.	43.11	22	1.96	
		Adjusted means	B.S.	58.80	1	58.80	28.69*
			W.S.	43.03	21	2.04	

**Significant at 0.05level of confidences*

(The table values required for significance at 0.05 level of confidence for 1 & 22 and 1 & 21 are 4.30 and 4.33 respectively).

In the table the results of analysis of covariance on vital capacity, forced vital capacity, slow vital capacity, and maximum voluntary ventilation. The obtained 'F' ratio of 2.31, 2.43, 0.84 and 1.21 for Pre-test means was less than the table value of 4.30 for df 1 and 22 required for significance at 0.05 level of confidence on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation. The obtained 'F' ratio of 6.84, 7.39, 5.30 and 31.12 for post-test means was greater than the table value of 4.30 for df 1 and 22 required for significance at 0.05 level of confidence on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation. The obtained 'F' ratio of 6.26, 6.24, 4.47 and 28.69 for adjusted post-test means was greater than the table value of 4.33 for df 1 and 21 required for significance at 0.05 level of confidence on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation. The result of the study indicated that there was a significant difference among the adjusted post test means of battle rope training group and control group on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation. And also battle rope training group showed significant improvement on vital capacity forced vital capacity, slow vital capacity, and maximum voluntary ventilation compared to control group.

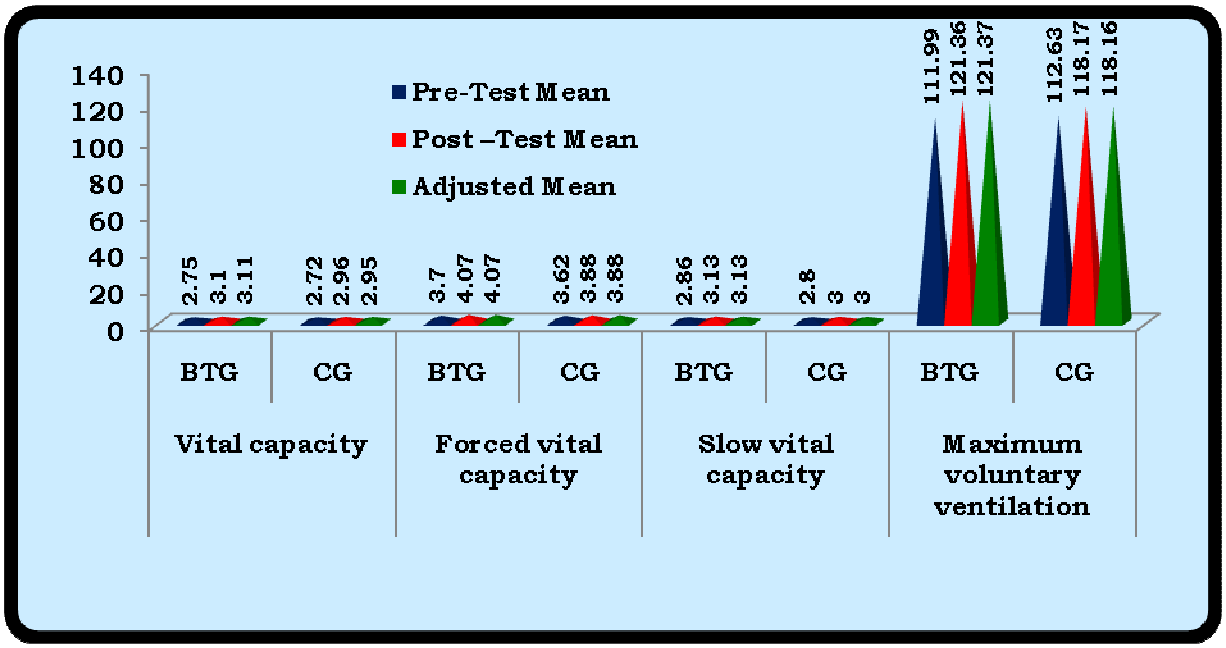

Figure-I The pre-test, post-test and adjusted post-test mean values of battle rope training group and control group on vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation.

Discussion of findings

The results of the study indicate that the experimental group which underwent battle rope training group had showed significant improved in the selected variables namely such as vital capacity, forced vital capacity, slow vital capacity, and maximum voluntary ventilation when compared to the control group. The control group did not show significant improvement in any of the selected variables. The past studies on selected physiological reveals of Ratamess et al (2015), Bobu Antony et al (2015) and Colin McAuslan (2013).

Conclusions

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

The experimental group volley ball players showed significant improvement in all the physiological variables such vital capacity, forced vital capacity, slow vital capacity and maximum voluntary ventilation.

The control group volley ball players did not show significant improvement in any of selected variables.

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Strength And Power Of College Students

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Abstract
The purpose of the present study was to compare the leg explosive power and handgrip strength of Indian college level men physical education and non-physical education students and also find out the relationship with body composition variables to leg explosive power and handgrip strength. A total of 500 (physical education- 250 & non-physical education- 250) college level male students, aged 18-25 years (mean 22.29 ± 2.21) were selected purposively as the samples of the study. Sargent vertical jump test and a standard adjustable digital handgrip dynamometer were used for measuring leg explosive power and handgrip strength respectively. Anthropometric measurements were taken for estimating % body fat, % skeletal muscle mass, lean body mass and body surface area of the selected subjects. The findings of the present study showing that physical education students have higher mean values in leg explosive power ($p \leq 0.01$) and handgrip strength ($p \leq 0.01$) than non-physical education students. Leg explosive power had significantly positive correlation ($p \leq 0.01$) with % skeletal muscle mass and lean body mass and significantly negative correlation ($p \leq 0.01$) with rest of the body composition variables irrespective of physical education and non-physical education students. Handgrip strength had significantly positive correlations ($p \leq 0.01$) with all the body composition variables irrespective of physical education and non-physical education students. It may be concluded that physical activity has strong positive relationship with leg explosive power and handgrip strength.
Key words: Explosive Power, Hand Grip Strength, % Body Fat.

Introduction

The most obvious benefit of strong, healthy muscles is the ability to perform everyday tasks efficiently and effectively, which contributes to a healthy lifestyle. The importance of strength and power in the majority of sports is well accepted and early identification of high strength and power levels can be a useful tool for talent identification, strength diagnosis, and development of sport specific profile [1-3]. According to Aragon-Vargas [4] vertical jump tests are common in physical education, fitness, and sports programs, as a means to assess lower limb power. Numerous researches have shown that the vertical jump strongly correlates with explosive leg power [5-8], many coaches will measure vertical jump to estimate explosive leg power.Handgrip strength is the integrated performances of muscles that can be produced in one muscular contraction [9]. It is widely accepted that grip strength provides an objective index of the functional integrity of the upper extremity [10,11]. Handgrip strength is an easily obtainable measure of physical health and muscle function. It is often used as an indicator of overall physical strength [10], hand and forearm muscles performances [9] and as a functional index of nutritional status [12-16] and physical performance [17]. Handgrip strength is a physiological variable that is affected by a number of factors including age, gender and body size. Strong correlations between handgrip strength and various anthropometric measurements (weight, height, hand length etc.) were reported earlier [18-22]. Thus, the purpose of the present study was to compare the leg explosive power and handgrip strength of Indian college level men physical education and non-physical education students and also find out the relationship with body composition variables to leg explosive power and handgrip strength.

Materials and Methods

Sample:The present study was conducted on 500 young college levels male students (age range 18-25 years) out of which 250 physical education students who were completed one year Bachelor of physical education (B.P.Ed) course and took part in obligatory physical activities under their course of study and 250 non-physical education students who were not participated regular physical activity. The subjects were selected from nineteen colleges located in nine different districts of West-Bengal in India irrespective of their caste, religion, dietary habits and socio-economic status. Exclusion criteria were set upon my knowledge of some genetic, psychological, neurological or chronic diseases which affecting leg explosive power, hand function and anthropometric characteristics.

Anthropometric Measurements

The age of the subjects were calculated from the date of birth as recorded in their institution. Height, weight, three muscle girths (upper arm, thigh and calf), and eight skinfolds thickness (triceps, sub-scapular, suprailiac, pectoral, axilla, abdominal, thigh and calf) of the subjects were measured with standard equipments and procedure. The examinations were conducted according to the guidelines of the International Society for the Advancement of Kinanthropometry (ISAK) [23]. The Technical Error of Measurement (TEM) was lower than 5% for skinfolds and 2% for the other measurements.

Body Composition

For calculating body density of the subjects Jackson and Pollock [24] formula was adopted. The Siri Equation [25] was used to convert body density to percent body fat of each participant. Poortman's [26] and Mosteller's [27] formula was taken up for assessing skeletal muscle mass and body surface area (BSA) respectively.

Leg Explosive Power:Sargent vertical jump test was conducted for measuring leg explosive power. First, confidence of appropriate physical condition were achieved, correct process of measurement were described for them and then subjects warmed up completely to perform the test. Subject stands side on to a wall and reaches up with the hand closest to the wall. Keeping the feet flat on the ground, the point of the fingertips was marked or recorded. This is called the standing reach height. The athlete then stands away from the wall, and jumps vertically as high as possible using both arms and legs to assist in projecting the body upwards. Attempt to touch the wall at the highest point of the jump. The difference in distance between the standing reach height and the jump height was the score. The best of three attempts was recorded in cm.

Handgrip Strength

The grip strength of both right and left hands was measured using a standard adjustable digital handgrip dynamometer (Takei Scientific Instruments Co., Ltd., Japan) at standing position with shoulder adducted and neutrally rotated and elbow in full extension. The dynamometer was held freely without support, not touching the subject's trunk. The position of the hand remained constant without the downward direction. The subjects were asked to put maximum force on the dynamometer thrice from both sides of the hands. The maximum value was recorded in kilograms. Total grip strength was calculated by adding both hand grip strength divided by two (right hand grip strength + left hand grip strength ÷ 2). Anthropometric equipments and hand grip dynamometer were calibrated before each assessment. All subjects were tested thrice and the best of three attempts was recorded. There was a one minute resting period between each hand grip strength testing in order to overcome fatigue.

Statistical Analysis

Descriptive statistics (mean, ± standard deviation) and Student t-test for independent samples were used for compared between the physical education and non-physical education students. Pearson's correlation of coefficients was used to establish the correlations of vertical jump and hand grip strength with other variables in physical education and non-physical education of college level students. Data were analyzed using SPSS (Statistical Package for Social Science) version 17.0 software. A 1% level of probability was used to indicate statistical significance.

Results

Table 1 shows the distribution of mean, standard deviations and t-value of height, weight, % body fat, % skeletal muscle mass, lean body mass, body surface area, vertical jump and grip strength of physical education and non-physical education college level men students. Statistically significant differences were found in weight ($t = 3.71$), % body fat ($t= 6.58$), % skeletal muscle mass ($t = 4.90$), lean body mass ($t =6.70$), body surface area ($t = 3.51$), vertical jump ($t = 11.24$) and in handgrip strength ($t = 14.75$) between physical education and non-physical education students.

Table 1. Descriptive statistics and t-value of body composition, vertical jump and grip strength of physical education and non-physical education students

Variables	Physical Education		Non-physical Education		
	Mean	S.D.	Mean	S.D.	t-Value
Height (cm)	168.82	5.63	168.33	5.59	0.97
Weight (kg)	60.44	5.53	58.43	6.48	3.71**
% Body Fat	12.37	3.01	14.36	3.69	6.58**
% Skeletal Muscle Mass	49.79	3.22	40.35	3.32	4.90**
Lean Body Mass	52.90	4.55	49.95	5.23	6.70**
Body Surface Area (m^2)	1.68	0.09	1.65	0.10	3.51**
Vertical Jump (cm)	49.13	6.87	42.41	6.43	11.24**
Grip Strength (kg)	49.46	4.74	43.44	4.34	14.75**

(**) indicates p< 0.01.

Table 2. Pearson correlation of body composition with vertical jump and hand grip strength of physical education and non-physical education students

Variables	Vertical Jump		Grip Strength	
	Physical Education	Non-physical Education	Physical Education	Non-physical Education
Height (cm)	-0.432**	-0.291**	0.269**	0.234**
Weight (Kg)	-0.279**	-0.175**	0.343**	0.107**
% Body Fat	-0.454**	-0.531**	0.230**	0.327**
% Skeletal Muscle Mass	0.285**	0.312**	0.258**	0.427**
Lean Body Mass (Kg)	0.527**	0.412**	0.268**	0.341**
Body Surface Area (m^2)	-0.339**	-0.226**	0.261**	0.117**

(**) indicates p< 0.01.

Pearson correlations of the body composition variables with vertical jump and handgrip strength were examined in physical education and non-physical education Indian college level men students and presented in Table 2. Vertical jump had significantly positive correlation ($p \leq 0.01$) with % skeletal muscle mass and lean body mass. For the rest of the body composition variables, it was observed that almost all the variables were significantly negative correlation ($p \leq 0.01$) with vertical jump irrespective of physical education and non-physical education students. Handgrip strength had significantly positive correlations ($p \leq 0.01$) with all the variables irrespective of physical education and non-physical education students.

Discussion

The main finding of present study was that assessment of leg explosive power and hand grip strength in physical education and non-physical education students and find out its relationship with body composition variables. The finding of the present study is similar to the work done by Ostojic et al [28], demonstrated the height and weight of a player had significantly negative correlation with vertical jump height. This result is disagreed by Aslan et al. [29] and Davis et al. [30] where they reported that there is no significant relationship between vertical jump and body height and weight. % Body fat is the amount of body fat stored in the body and does not take into account the lean body mass and muscle mass. Table 2 shows that % body fat and vertical jump have a negative association. An individual with lower % body fat definitely has a higher vertical jump [31,32]. This is because the athletes with lower % body fat and greater power are more likely to generate greater velocity of kicking [33]. The study done by Davis et al. (30) has reported that % body fat is the best predictor of vertical jump for recreational male athletes aged

between 20 to 37 years old. This result corresponds to that of Roschel et al. [33], who stated that the sum of skinfold thickness has significant negative association with vertical jump height. % Body fat is related to the work performed during vertical jump. Since work is the product of average force acting on the subject and the displacement of the jump, heavier athletes need more work to move the body to the same displacement achieved than the lighter athletes [33,34].Height, weight and lean body mass were closely correlated with grip strength. The literature describes a positive association between Right and left handgrip strength with weight, height, BMI, lean body mass and body surface area [35-41]. Luna-Heredia et al. [42] described that body height is directly correlated with handgrip strength, possibly because this factor is more closely related to the lean body mass. The current results were also consistent with others researches that report positive associations of body fat with handgrip strength, as evidenced by studies undertaken by Deforche et al. [43], Casajus et al. [44] and Artero et al. [45]. The results of this study indicate that mean value of the leg explosive power and handgrip strength of physical education students was significantly higher than the non-physical education students. Explanation of this finding may arrange the physical education students were regularly participated in physical activity and they also possessed higher amount of % skeletal muscle mass and lean body mass.

Conclusion

It may be concluded that physical activity has strong positive relationship with leg explosive power and handgrip strength. As the present study is examine relationships between leg explosive power and handgrip strength with various body composition variables in men physical education and non-physical education college aged students of few districts in India, so more research on larger area and other sex is needed to confirm or refute this finding.

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Basics of strength and conditioning drills for basketball player

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Introduction:

Basketball is a fast paced game. Up and down action on the court, defensive positioning down low under the basket combined with pure hustle for loose balls on the floor make the sport of basketball one of the most exciting sports to watch. For the strength and conditioning coach working with basketball players, the responsibility of designing a program that will make them better athletes for their sport is rewarding. Flexibility, conditioning, speed, quickness and agility along with strength and power are the areas of emphasis when designing the Boston University Basketball strength and conditioning program.

Strength training for athletics is only valuable in the context of the sport. We are not a weightlifting team, nor are we marathon runners. Too much emphasis in one area of training leaves you deficient in other areas. Overall fitness, specific to the needs of the game of basketball, is our priority. There are several elements to make up our overall levels of fitness. They include:

1. Muscular strength 2. Cardiovascular fitness 3. Flexibility 4. Skill development
5. Rest and recovery

Objectives: it is important to list the objectives that are to be accomplished during this phase. Once the objectives have been listed, it becomes easier to outline and design a program that is specific to the task at hand. The objectives for the pre season program are:

Prepare the team for the practice volume

Improve sport specific speed and conditioning.

Improve flexibility. Improve core strength. Improve total body strength and power.

Knowing the objectives, the strength and conditioning coach can now begin the program design process. Addressing each of these objectives with a periodized approach to progression, while implementing functional exercises, will help the athletes reach the level of in-season fitness needed for the beginning of practice.

Strength Development: the common definition of strength is the ability to exert a force against a resistance the strength needed for a sprinter to explode from the blocks is different to strength needed by a weight lifter to a 200kg barbell. Therefore, it implies that there are different types of strength.

Types of Strength:

Maximum strength: the greatest force that is possible to over come a resistance in a single maximum contraction.

Explosive strength: the ability to overcome a resistance with a fast contraction.

Strength endurance: the ability to express force over a longer period of time.

Strength training program

The strength-training program consists of four major circuits. These circuits focus on building overall strength while targeting on the legs, chest, arms, and shoulders. We will spend three to five days per week in the weight-room during the early part of the preseason. We use the preseason, postseason, and summer for strength development. As the season approaches, we will scale back the weight training sessions to two to three days a week and lift for maintenance only, not development. Two weeks after the season is over, we will start an eight-week cycle of lifting four days a week for strength development. We encourage the athletes to complete an eight-week cycle of strength development over the summer.

Circuit A (WC)
Lat. Pull-downs (front & back)Triceps (extension and pull down)
Upright row Supine pull-overDumbbell curls (regular, alternate)
Circuit B (WR)
Bench press (wide, tight)Shoulder shrugs (dumbbell)Seated military press (dumbblee)Dumbbell fly
Circuit C (WC)
Leg press Seated military press,Leg extension ,Hamstring curls ,Pectoral fly,Dumbbell curls
Circuit D (WR)
Squats (regular, box squats)Leg sled (squats, toe-raises)Bench press (regular)Incline bench press
Triceps plate press

FLEXIBILITY PROGRAM:
We will start each daily session with a warm-up activity and stretching. We will also use a cool-down session to end each daily session to help reduce the risk of injury
INDIVIDUAL SKILL DEVELOPMENT WORKOUTS
These skill development sessions will be completed two to three times a week in the preseason. Each skill development workout is built specifically for the athlete and will challenge the athlete to improve their basketball specific skills. We will concentrate on offensive fundamentals in these sessions. The fundamentals we stress include:
Ball-handling/dribbling
Passing Preparing for the shot/footwork
Cutting , Screening Shooting Free-Throws Perimeter-moves Post-moves
OTHER PRINCIPLES:
Rest and recovery is just as important as the exercise itself. A college athlete's greatest challenge may be getting enough rest to make steady gains from strength and conditioning programs. Each athlete should get on a schedule that allows 7 to 10 hours of sleep per night. The athlete should take naps if they are easily fit in the schedule.
Nutrition is the one component of the fitness program where most people are misinformed or misunderstood. Everyone should eat a well-balanced diet. A balanced diet should consist of eating approximately 60% of your daily calories from carbohydrates, 20% from fats, and 20% from proteins. It is important to maintain food intake at a constant level throughout the day. Remember to eat or drink carbohydrates within 60 minutes of training for best results.

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Physiological Performance Structure Of Male Kho-Kho Players

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Abstract
The purpose of the study was to find out the relationship between selected physiological variables and playing ability of national level Kho-Kho Players. For the present study, researcher fifty (N=50) elite Kho-Kho players were randomly selected as subjects from the different district of telangana. All the subjects were in regular training schedule. The selected physiological measurements were taken with the help of different method. Resting heart rate was measured by pulse rate, blood pressure was measured by Sphygmomanometer, force vital capacity was measured by peak flow meter, and Vo2max was measured by Queens College step test. The performance of the subjects was measured by judges rating scale during the match. Product moment method for inter-correlation was applied for analysis of data. Resting heart rate, Systolic blood Pressure, Force vital capacity was significant with the performance in 0.05 levels. Diastolic blood pressure and Vo2 max are significant with the performance in 0.01 levels. It can be concluded from the findings of the present study that heart rate, Systolic blood Pressure, Force vital capacity, Diastolic blood Pressure and Vo2 max measurements contribute significantly in Kho-Kho performance.

Keywords: Physiological parameters, Sphygmomanometer, Queens College step test, judges rating scale.

Introduction

Performance structure is the specific make up of performance in general and sports performance in specific with all the constituent factors. Performance structure of any sport is complex in nature with a very high number of influencing variables. It is complex because some of its components are dependent and some others external; some of them can be controlled but some of them are beyond control of the athlete, some are physical and some are physiological. Kho-Kho is a game of speed, stamina, endurance, strength and skill. Dodging and controlled sprinting makes the game exciting. Kho-Kho is a game of the participants` physical fitness, strength, speed and stamina and dodging ability. As the level of performance increases the players attains high degree of physical fitness. Peter and Haliski (1950) [13] supported this view that the successful participation in any game is directly related to physical fitness. Bernard (1966) reported that physical fitness improves in those who take regular physical exercises. Regular participation in games significantly contributes to higher level of performance and greater degree of physical fitness amongst the players. Bosco (1975) [13] found a low heart rate among champion gymnasts. Low heart rate is the outcome of a good endurance and a symbol of high degree of fitness. The contents of sports performance structure consists of individual key areas which are called components of performance structure. Physical component is generally focused on developing motor abilities. Technical component focuses on acquiring sports skills through motor learning. Tactical component focuses on acquiring and further development of different ways to conduct sports contest on a purposeful basis. Physiological component is focused on improving the athlete's total performance during competition.

For the present study researcher delimited the study on Physiological component.

Objective of the Study

To study the physical parameters (viz. height, weight) of national level Kho-Kho players. To study the physiological profile of national level Kho-Kho players in detail. To study the impact of the physiological variables (i.e. Resting Heart Rate, Blood pressure -systolic & diastolic both in resting condition, Force vital capacity and Vo2 max) on kho- kho performance.

Methodology

Selection of Subjects

A total of fifty (50) male state level elite Kho-Kho players were selected as subjects for this study. All the subjects were active Kho-Kho players and used to practice regularly under the direction and supervision of qualified coaches. They were also bonafide Kho-Kho players of state level Kho-Kho game. They were in the age group of 15 to 23 years.

Methods were used for measuring Physical parameter

Sl. No.	Physical parameters	Use of tools	Unit of measurements
1	Age	from their date of birth	Years
2	Height	using anthropometric rod adopting standard procedure	cm
3	Weight	Using Weighing Machine	Kg

Sl. No. Physical parameters Use of tools Unit of measurements 1 Age from their date of birth Years 2 Height using anthropometric rod adopting standard procedure cm 3 Weight Using Weighing Machine Kg

Methods were used for measuring Physiological parameter

S l. no.	Physiological parameters	Test Items tools	Unit of Measurement
1	Heart rate	Pulse Rate	beats / min
2	Blood Pressure	Sphygmomanometer	mm of hg
3	Force Vital Capacity	Peak Flow Meter	ml / min
4	Vo2 max	Queens college step test	ml/ kg /min

S l. no. Physiological parameters Test Items tools Unit of Measurement 1 Heart rate Pulse Rate beats / min 2 Blood Pressure Sphygmomanometer mm of hg 3 Force Vital Capacity Peak Flow Meter ml / min 4 Vo2 max Queens College step test ml/ kg /min

Measuring Kho-Kho playing Ability

Kho-Kho playing ability was measuring by Judges rating Scales

Statistical analysis

To determine the relationships, Pearson's Product moment method for inter-correlation was applied and the alpha level was set at 0.05.

Results and Discussion

The results of the study are given below in the following Tables

Table 1: Mean and Standard deviation of the Physiological Profile and Kho- Kho playing ability of the subjects (N= 50)

Table 1: Mean and Standard deviation of the Physiological Profile and Kho- Kho playing ability of the subjects (N= 50)

SL. No.	Parameters	Mean	Standard Deviatation
1.	Resting Heart Rate	65.44	±1.94
2.	Systolic blood Pressure	122.36	±4.411
3.	Diastolic Blood Pressure	71.24	±8.28
4.	Force vital capacity	707.7	±81.973
5.	Vo2 max	43.758	±1.934
6.	Kho-Kho playing ability	56.8	±3.521

SL. No. Parameters Mean Standard Deviation 1. Resting Heart Rate 65.44 ±1.94 2. Systolic blood Pressure 122.36 ±4.411 3. Diastolic Blood Pressure 71.24 ±8.28 4. Force vital capacity 707.7 ±81.973 5. Vo2 max 43.758 ±1.934 6. Kho-Kho playing ability 56.8 ±3.521

From the Table no. I, it was found that the mean Heart Rate of the selected Kho-Kho players was 65.44 beats/min with SD of 1.94 beats/min, mean Systolic Blood Pressure of the selected Kho-Kho players was 122.36 mm of hg and SD of 4.11 mm of hg. , mean Diastolic Blood Pressure of the selected Kho
Kho players was 71.24 mm of hg and SD of 8.28 mm of hg. Mean force vital capacity of the selected Kho-Kho players was 707.7 ml/min with SD of 81.973ml/min. Mean Vo2 max of the selected Kho-Kho players was 43.758 ml/kg/min with SD of 1.934.

With the knowledge of mean values of selected, physiological parameters, the co-efficient of correlation between performance ability and the selected physiological parameters were computed. Table -6 shows the results.

Table 2: Coefficient of correlation between performance ability and the physiological parameters

SL. No. Parameters Co-relation with Playing Ability 1. Resting Heart Rate 0.27* 2. Systolic blood Pressure 0.283* 3. Diastolic Blood Pressure 0.566** 4. Force vital capacity 0.262* 5. Vo2 max 0.503** *Significant at 0.05 level **Significant at 0.01 level

The coefficient of correlation between playing ability and heart Rate was .27. The coefficient of correlation between playing ability and Systolic Blood Pressure was – 0.283. The correlation between playing ability and Diastolic Blood Pressure was - 0.566. The correlation between playing ability and Force vital capacity was 0.262. The correlation between playing ability and vo2 max was 0.503.

Discussion

The results of the study clearly show that the kho- kho plying ability is significantly and positively related to the physiological parameters. Out of five physiological parameters Diastolic Blood Pressure and Vo2 max are significant in 0.01 levels. Resting Heart Rate, Systolic blood Pressure, Force vital capacity was significant in 0.05 levels. Positive and significant force vital capacity and Vo2 max indicates the goodness of energy liberation system which is very much useful for performance in Kho-Kho. Whereas Positive and significant lowering of resting heart rate indicate the efficient heart (Athletic heart) i.e. accelerate and decelerate the speed quickly. Positive and significant increment of Diastolic and Systolic blood Pressure during playing situation indicate more blood supply to the active muscle; which is very necessary for good performance. The findings of the study are in complete agreement with the results of the earlier studies reported by Brooks, Fahey and White (1996) that systolic blood pressure rises steadily during exercise, in a similar trend to that of heart rate.

Conclusion

Majority of the researcher show that in many of the games, playing ability has close relationship between physical and physiological component. Kho-Kho players having higher Vo2 max, be the good performer in Kho-Kho game as these qualities are the good predictors of Kho-Kho skills. Average and low status are unsuitable for the game. Kho- Kho players are found to be more endurance and powerful. National level players have greater physical and physiological abilities. There is interrelationship between physiological and playing ability.

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Training and Contribution of Youth Football Projects to Produce New SuccessorPlayers in Wolaita Dicha Sport Club Ethiopia

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Abstract
The Aim Of This Study Was To Evaluate The Training And Its Contribution Of Youth Football Projects To Generate New Successor Players In The Case Of Wolaita Dicha Sport Clubs. The Data Collected Through Questionnaire Was Organized In The Form Of Tables And Figures. The Organized Data Was Presented And Analysed Quantitatively By The Methods Of Descriptive Statistics Such As Frequency, Percentage And Majority Vote. In Addition To This The Researcher Also Used Kruskal-Wallis Test And Mann-Whitney U Test In Order To Know Whether A Statistically Significant Difference Is There Or Not In Between Dicha Youth Football Project Players. The Result Of The Study Found Thatdicha Under Seventeen Football Players Progress Compared To Past Years Are Higher Than From Both Under Fifteen And Under Twenty Clubs,Dicha Under Fifteen Project Players Have Less Knowledge About The Duration Of Warming Up And Cooling Down Exercises When Compared To Under Seventeen And Under Twenty Project Players, The Technical And Tactical Support Given By Main Dicha Coaching Staff To Youth Dicha Coaching Staff Was Very Less,The Training Field Where Dicha Under Fifteen Football Projects Clubs Doing Their Activity Was Not Suitable For Performing Their Daily Session Activities, Materials Are Not Equally Distributed Between Dicha Youth Football Projects. These Findings Will Be Useful To All Responsible Bodies Which Are Working Youth Football Projects.
Key Words: - Training, Contribution, Youth Football Projects,Successor.

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Introduction

Football is the most popular form of sport on the world, which is being played in every nation without exception of gender, race and age and the number of player increasing year by year in an explosive rate. Youth football project programs are now days a prime safe place for teaching young athletes about important social values and life skills that will benefit them well in to their future lives. For youth players skills, techniques and good movement are most easily grasped in a younger age, so the establishment of youth football club is not an optional it is a mandatory. Therefore, the program of youth football training is very important in the production of new successor players who are beneficial to the main club. This can be achieved through a well-organized and structured youth football development program.

In order to develop and increase the contribution of youth football projects to generate new successor players, the development and improvement of players performance is crucial more over players technical, tactical, physical, moral and psychological development are vitals and fundamentals. Having a good youth academy will have an increased impact on a club`s ability to compete in the league. “The development of players via a youth system has always existed and is part of the DNA of a club” so for any Clubs who wants to be a good competent and successful at national and international level, giving more time for youth and train them at underground level is mandatory not an option in order to attain this objective. Regarding this as cited in Ashenafi Kefyalew 2010 (Ashenafi Kefyalew, 2010), According to Wondimu T. and Damen H. (2004:41) Football training is an act of faith, which is best regarded in terms similar to a bank deposit account. The more one puts in, the more can be drawn out of a future date. If the investment is wise the interest yields are greater and if players are systematically and scientifically trained can achievement of performance is superior to earlier performance.

Since the demands of the main club in the modern soccer cannot be addressed with only a well-structured program of youth soccer, the systematic control and assessment of the program in relation to its contribution to the main club is very important. In order to achieve and succeed the plan of the youth project, coaching methods and styles should be given more emphasizes. In relation to this, the U.S. Soccer "C" license (2008:3) suggests that, "It is important to consider coaching methods and styles to be part of a broad continuum that ranges from directive to guide. In the course of a season, and certainly depending on the age of the players, a coach can use all methods and styles effectively. A balanced approach that employs each method and style appropriately and at the right moment is always best." Besides, beyond this, Florida Youth Soccer Association (FYSA) Coaches Handbook (2010:8) states

The youth level is where we need to realize that the game we play is not the "adult game." Age appropriate training is crucial at each age group to much the activities to their abilities, needs and individual characteristics. The game must be enjoyable for the players in order to keep their enthusiasm high so they continue to the junior level. The activities need to be a purposive." Nowadays soccer is one of the most interesting games in the world, different organizations and business men invest their capitals on these games because of its popularity. Clubs also put their maximum efforts on youth football projects to generate new successor players to keep their superiority over others. In our country Ethiopia Wolaita Dicha Sport club is one of the participants in Ethiopian premier league. Even if Wolaita Dicha Sport club has four year experience on Ethiopian premier league, it works hard on youth football projects to achieve its main objective of being the champion. So the main focus of this study was that evaluating training and its contribution of youth football projects to generate new successor players in Wolaita Dicha Sport Club.

Methods

Wolaita Dicha Sport Club has five male youth football projects in Wolaita Zone. Those are under fifteen projects which are lives in Areka, Boditi, and Soddo towns, under seventeen and under twenty Dicha football projects which are only lives in Soddo town. Thus, the population of this study was under fifteen, under seventeen, under twenty football project players and Dicha youth football coaches and top administrative bodies. The total size of the population was 133.

The data will collect through questionnaire was organized in the form of tables and figures. The organized data was presented and analyzed quantitatively by the methods of descriptive statistics such as frequency, percentage and majority vote. In addition to this the researcher also used Kruskal-Wallis test and Mann-Whitney U test in order to know whether a statistically significant difference is there or not in between Dicha youth football project players. The data will analyzed through using computerized statistical package software (SPSS V 20). The level of significance is set at $P \leq 0.05$.

Results And Discussion

Intable1,AKruskal-WallisHtestshowed thattherewasastatistically significantdifference inplayer'sinvolvementin preparationof trainingplanbetweenthedifferentagelevel($\chi^2(2)=7.33, p=0.026$)withameanrankof18.50forunderfifteen,23.00forunderseventeenand27.50 forundertwenty. PosthocpairwisecomparisonbyMann-WhitneyUtestrevealedthatundertwentyplayers'participationscoreishigherthanunderfifteenplayerswithmeanrankof18.50and12.50respectively at(U(30)=67.500, P=0.007); underseventeen players' participationintrainingplanscoreishigherthanunderfifteenplayers'participationscorewith meanrankof17.00and14.00respectivelyat(U(30)=90.00,P=0.24).Similarly,undertwenty players'participationintrainingplanscoreishigherthanunderseventeenplayers'participation scorewith meanrankof17.00 and14.00 respectivelyat(U(30)=90.00,P=0.073).Therefore, Dichaundertwenty footballplayershadhigherchanceofparticipationintrainingplanwhen comparedtounderseventeenandthatofunderfifteenfootballprojects.

Table 1: Giving chance to players in preparing a training plan

Kruskal Wallis Test								
Q1	**Group**	**N**	**Mean**	**SD**	**Mean Rank**	**Chi-Square**	**DF**	**Asymp. Sig. (2-tailed)**
	Under 15	15	0.80	0.41	18.50	7.33	2	P = 0.026
	Under 17	15			23.00			
	Under 20	15			27.50			

N: number, SD: Standard deviation, DF: Degree of freedom

Intable2,AKruskal-WallisHtestshowedthattherewasnoastatistically significantdifference incoach's activityof motivatingtheirplayersbetweenthedifferentagelevel($\chi^2(2)=0.996, p=0.61$) withameanrankof20.63forunder fifteen,25.17forunder seventeen and23.20 for undertwenty.ThisindicatesthatDichayouthfootballproject'scoachesareinrelativelysimilar waymotivatingtheirplayers.

Table 2: Motivation given by your coach

Kruskal Wallis Test								
Q2	**Group**	**N**	**Mean**	**SD**	**Mean Rank**	**Chi-Square**	**DF**	**Asymp. Sig. (2-tailed)**
	Under 15	15	2.96	1.02	20.63	0.996	2	P = 0.61
	Under 17	15			25.17			
	Under 20	15			23.20			

N: number, SD: Standard deviation, DF: Degree of freedom

Regardingtheeffectivenessofcurrentlyimplementingmethodsoftrainingintheproductionof newsuccessorplayers3(42.9%) oftherespondent coachessaidtheeffectivenessofcurrently implementingmethodsoftrainingwasveryhigh.While3(42.9%)oftherespondentsgavehigh ranksfortheeffectivenessofcurrentlyimplementingmethodsoftraining.Whereastherest 1(14.3%)oftherespondentcoachessaidtheeffectivenessofcurrentlyimplementingmethods oftraining waslow.Therefore,accordingtothemajority oftherespondents wecanconclude thatcurrentlyimplementingmethodsoftrainingwaseffectiveintheproductionofnewsuccessorplayersinWolaita Dicha youthfootballprojects.

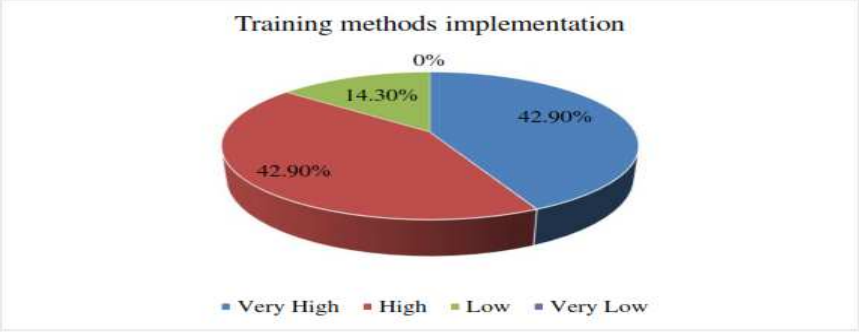

Figure 4: Implementing methods of training in the production of new successor players

Forthequestion, howdoyouratetheimportanceofWolaitaDichayouthfootball projectsin theproduction ofnewsuccessorplayers,3(42.9%) and4(57.1%) oftherespondent coaches gave very high and high ranks respectivelyfor Wolaita Dicha youth football projects. AccordingtoresultsonecanconcludethatWolaitaDichayouthfootballprojectsplaysveryimportantrolesintheproductionofnewsuccessorplayers.

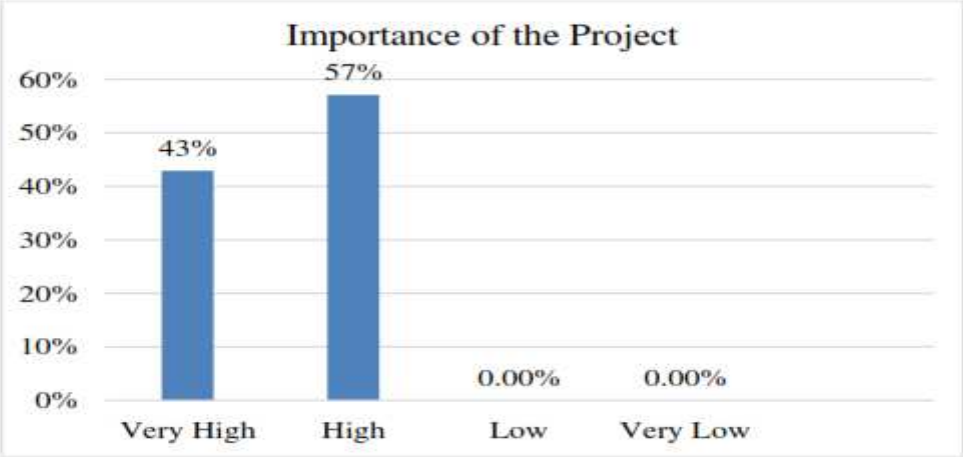

Figure 5: Importance of Wolaita Dicha football project in the production of new successor

Conclusion

Basedonthediscussionsandsummaryofthefindingsthefollowingconclusionwasdrawn.

Dichaunderfifteenprojectplayersarenotactiveparticipantonthedevelopmentof training planpreparations.Theircoachesnevergavethemmorechances toparticipate intheplanning processwhencomparedtounderseventeenandundertwentyyouth footballprojects.

Dichaunderfifteentrainingfield footballprojectsclubs wheredoingtheir activity wasnotsuitableforperformingtheirdailysessionactivities.

Dichaundertwenty projectplayersaremoresatisfiedofbeingthememberof Dicha youthfootballprojectthantheirsuccessors.

TechnicalandtacticalsupportgivenbyDichamaincoaching stafftoyouthDicha coachingstaffwasunsatisfactory.

All coachesnearby wereusingathlete centeredapproachduringtrainingsession.

MostofthetimemajorityofDichayouthfootballproject coacheswerenot monitoring theplayerswarmingup andcoolingdownactivities.

Recommendations

Based on the conclusions derived from the major findings of the study the following recommendationsareforwarded

Whenplayersarenotawareoftheimportanceofwhattheyareperforming,theyareless interestedonthatactivity.So,coachesshouldgivechanceforplayerstoparticipate in theplanningprocess.

Accordingtothefindingsindividualplayers'progressrateofDichafewer thanfifteenplayers arelessthanthatoffewer thanseventeenandfewer thantwentyprojectplayers.Therefore,Dicha underfifteenprojectplayers' coachesneedtolookbacktheircoaching methodology andshouldhavetomakesomeimprovementonit.

Insteadoffollowing warmingupandcoolingdownactivitiesDichayouthfootball coachesarebusyondoingotheractivities.CoachesofDichayouthfootballprojectsare neededtofollowwarming upandcoolingdownperiodsandalsoneedtotellthe importanceofwarmingupandcoolingdowntotheplayers.

Coachesshouldnotalwaysuseonly verbalinstructionstomanagethesessionandto introducenewskillstotheplayers.Verbalinstructionsanddemonstrationsshouldhave togowithsidebyside.

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Comparative Study On Dribbling Control Ability Test for Kerala And Tamil Nadu Basketball Players

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Abstract
Basketball, with its dynamic development of the game, is one of the world's most popular sports. Basketball is characteristic for its simultaneous existence of the cooperation and opposition relationship in either offensive or defensive phase of the game. A professional basketball player is one whose source of livelihood is basketbal.Methodology: The purpose of the study is to compare the dribbling control ability test for 16 to 19 years boys' basketball players of Kerala and Tamil Nadu.The subjects selected for this study were one hundred and twenty (N=120 male basketball players between the age group of 16to 19 year from were taken for the study the subject 60 from Kerala and 60 from Tamil Nadu divided into two group. comparative on dribbling control ability test among 16 to 19 years boys' basketball players.. The mean values of Kerala group of the players were 7.42 respectively. The mean values of Tamil Nadu group of the players were 7.61respectively.The standard deviation of Kerala group 0.584 and the Tamil Nadu group of standard deviation 0.76. The Correlation of the Kerala group of the players was 0. 78* Tamil Nadu group of the players 0.67* respectively which was tested at the level of significant at 0.01 level, there will be significance difference between Kerala basketball players and Tamil Nadu basketball players.Conclusion: The data showed the There will be significant difference between Kerala basketball players and Tamil Nadu basketball players on dribbling control ability test

Introduction

Basketball, with its dynamic development of the game, is one of the world's most popular sports. Basketball is characteristic for its simultaneous existence of the cooperation and opposition relationship in either offensive or defensive phase of the game [1]. A professional basketball player is one whose source of livelihood is basketball; he plays the game and earns his living from it.Fundamental skills are the plenty in any game, and basketball is on exception to this a high degree of performance depends on the experts of these skills. To enjoy the game frankly; one needs to develop ability in fundamental skills. When a player has expert the fundamental skills of the game, a feeling of gaining expertness over the game comes. In order to measure these skills, tests should be conducted for evaluation purpose tactics will succeed only through individual fundamental skills. Therefore, every player must know about the importance of perfecting the fundamental skills .from this we can understand that only a players with perfection in all the fundamental skills can become a top player. The game of basketball is very complicated in terms of skills and team work. 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 wellbeing. High level of performance otherwise known as playing ability in basketball depends upon proficiency over the fundamental skills. The purpose of the study is to compare the dribbling control ability test for between age group of 16 - 19 years boys' basketball players of Kerala and Tamil Nadu

Methodology

The subjects selected for this study were one hundred and twenty (N=120) male basketball players between the age group of 16 to 19 year from Kerala And Tamil Nadu boys basketball players , in INDIA.

Selection of variable

To test the Dribbling skill in basketball game between Kerala and Tamil Nadu basketball players.

Test Administration

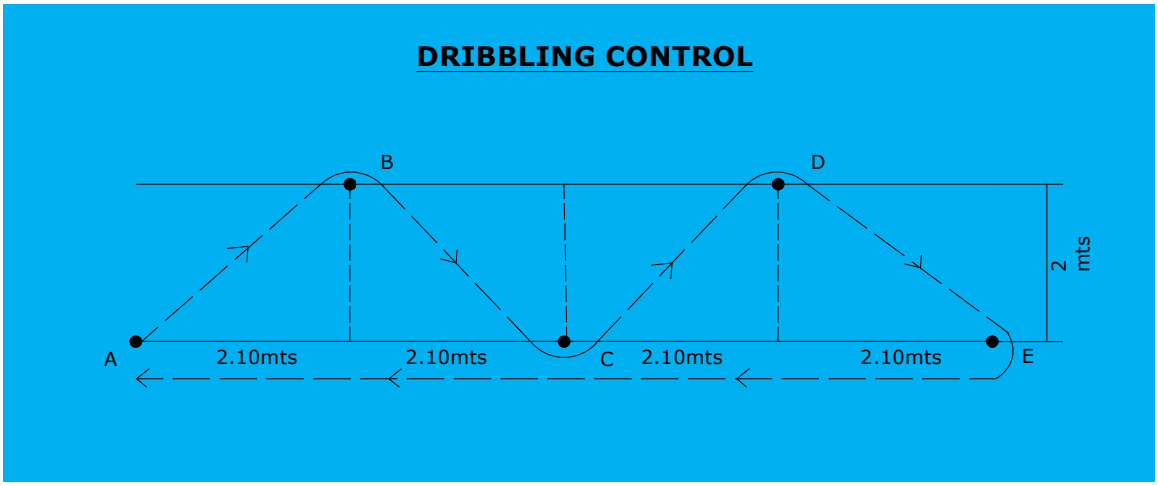
Dribbling Control Test

a) Purpose: To measure skill in handling the ball while the body is in movement.

b) Equipment: Standard inflated basketball five cones stopwatch and tape for marking.

Test/Target Dimensions

An obstacle cones marks by five cones will be set up in zigzag at basketball court.



Three times of the test will be given. The 1st is a practice trial and the last 2 are score for the record with the ball. The performer will stand near the starting line on the signal 'ready go' the performer will start the dribble with right hand dribble from starting line to cone (A) from (A) to (B) left hand dribble from (B) to (C) right hand dribble from (C) to (D) left hand dribble (D) to (E) Right hand dribble they have to dribble in this method from (E) to (A) straight dribbling with alternate dribbling up to until the finishing line is crossed by both fetes.

Violations

Ball handling infractions (travelling double dribble etc) stop trial return to start and begin timing.

Scoring

If they perform fails to begin at the point in course where control was lost the trail will be stopped and the performer has to return lost and began again.

Results

Table No.1 Statistical interpretation between Kerala and Tamil Nadu basketball players.

Group	Mean	Standard deviation	Co-correlation	Significance
Kerala	**7.42**	**0.58**	**0.78**	**0.01**
Tamil Nadu	**7.61**	**0.76**	**0.67**	

Above table shows that the mean values of Kerala is 7.42 and Tamil Nadu is 7.61. Kerala team players have more consistent than Tamil Nadu players because their standard deviation is nearer to mean than Tamil Nadu players. The Kerala team has significant relationship with 0.78 than Tamil Nadu team players of 0.67 at critical table values of 0.01

Discussion of the study

The data revealed that dribbling control ability test among boys (16 to 19 years) basketball players was observed and there was significant difference between Kerala basketball players and Tamil Nadu basketball players.

Conclusion

Results of this study indicated that dribbling ability plays important role in basketball game. Therefore, in this study the Kerala players had more consistent with more significant relationship than Tamil Nadu players.

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Perceived Organizational Support among National Football Referees Of South India

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Abstract:
Football provides an opportunity for the expression of feelings and emotions (Coakley, 1994), leading to enhanced mastery of anxious, delicately charged environment and leading to vigorous and hostile behavior. We cannot have any football event without the referee. They ensure matches are played fairly, based on technical assessment, implementing the laws of the game, time and score. The study is undertaken to examine the Perceived Organizational Support among National referees of South India. 52 National referees of South India participated in the study. One way Anova was used to analyze the data. There is no significant difference in the refereeing administration support towards the referees contribution, ignore complaints against them, cares about their feelings and goals, acquiring higher standards and referees administrations being fair, competent enough in issues related towards the referees goes a long way in supporting referees and bringing down the attrition rate among referees .
Key Words: Perceived Organizational Support, National Referees, South India

Introduction

Football is arena of achievement were ability of an individual is examined, scrutinized and evaluated. An estimated 400-500 million people play football. It provides an opportunity for the expression of feelings and emotions (Coakley, 1994), leading to enhanced mastery of anxious, delicately charged environment and leading to vigorous and hostile behavior. We cannot have any football event without the referee. They ensure matches are played fairly, based on technical assessment, implementing the laws of the game, time and score. Though refereeing is referred as the worst job in football, yet it gives the best satisfaction in the world. Despite all the attraction, very few people take up the whistle and are in the middle. They accept this profession thinking the referee's administration along with the Football Association would back them at all times. This study is undertaken to know the level of support the refereeing administration or the football association provides the referee. The objective of the study is to examine the level of "Perceived Organizational Support among the National football referees of South India."

Delimitations

The level of anticipated organizational support in this study would be assessed through Perceived Organizational Support (Eisenburger, et al., 1986).The study is delimited to National football referees of Karnataka, Tamil Nadu, Kerala and Andhra Pradesh.

Limitations

The referees involved in the study are from outdoor sports.The referee's participation in the study is purely voluntary in nature.The referees would answer the questionnaire honestly and best of their knowledge.

Hypothesis

There is significant difference in perceived organizational support among National football referees of South India.

Methodology And Procedure

The procedures adopted to gather and analyze the data has been presented in this chapter. This chapter is presented in two sections that is.

Selection of the subjects and Sample size for the study

52 National referees from State Football Association of Karnataka, Tamil Nadu, Kerala and Andhra Pradesh on the national panel of the AIFF who officiate actively in competitive football.

Testing Instruments for collection of data and Procedure:The data for this study comes from the 16-item Perceived Organizational Support Scale (Eisenburger, et al. (1986) on the 7-point Likert-type format from Strongly disagree (0) to Strongly agree (6) to assess the level of support a referee receives from the association/referees board. perceived organizational support on Perceived Organizational Support Scale. Potential referees were contacted and asked promptly complete the scale.

Analysis Of Data :TABLE 1: Descriptive Statistics and Anova

STATEMENTS (VARIABLES)	MEAN	SD
My officiating administration values my contribution to the organization's well-being	4.79	0.457
My officiating administration fails to appreciate any extra effort from me	4.71	0.572
My officiating administration would ignore any complaints from me	3.87	1.010
Even if I did the best job possible, my officiating administration fails to notice me	4.79	0.457
My officiating administration shows very little concern for me	2.75	1.186
My officiating administration really cares about my well-being	2.50	1.111
My officiating administration cares about my general satisfaction in officiating	2.77	1.231
My referees committee takes the time to learn about my career goals and aspirations	4.13	0.768
My referees committee gives me helpful feedback about my performance	4.31	0.643
My referees committee provides game assignments that give me the opportunity to develop and strengthen new skills	3.73	0.689
My referees committee cares about whether or not I achieve my goals	3.71	1.160
My referees committee is competent in doing his/her job	2.67	1.279
My referees committee is fair to me	3.02	1.336
My referees committee shows interest in the feelings of subordinates	3.81	1.329
I like my referees committee	3.75	1.312
My referees committee supports my attempts to acquire additional training or education to further my officiating career skills	4.08	0.737
Would you miss the players if you left officiating?	3.69	0.940

Descriptive Statistics and Anova

Table 2: Mean difference of Perceived Organizational Support of National Referees from different states

STATEMENTS (VARIABLES)	STATES			f-value	p-value
	KA	TN	KL		
	Mean ± SD				
My officiating administration values my contribution to the organization's well-being	5.15 ± 1.214	4.50± 2.000	4.93 ± 2.219	0.555	0.578
My officiating administration fails to appreciate any extra effort from me	4.54± 2.025	3.71 ± 1.829	4.20 ± 1.265	1.029	0.365
My officiating administration would ignore any complaints from me	3.38 ± 1.261	3.33 ± 1.523	3.20 ± 1.781	0.056	0.946
Even if I did the best job possible, my officiating administration fails to notice me	4.23 ± 2.048	4.13 ± 1.454	3.53 ± 1.642	1.774	0.467
My officiating administration shows very little concern for me	4.62 ± 1.850	4.00 ± 1.642	3.00 ± 1.890	3.038	0.057
My officiating administration really cares about my well-being	5.77 ± 1.092	5.00 ± 2.043	5.40 ± 1.993	0.763	0.472
My officiating administration cares about my general satisfaction in officiating	5.00 ± 2.000	4.21 ± 2.126	4.87 ± 1.727	0.864	0.428
My referees committee takes the time to learn about my career goals and aspirations	5.08 ± 0.954	4.33 ± 1.786	5.20 ± 1.781	1.633	0.206
My referees committee gives me helpful feedback about my performance	6.23 ± 0.832	5.25 ± 1.984	5.40 ± 2.197	1.254	0.294
My referees committee provides game assignments that give me the opportunity to develop and strengthen new skills	6.00 ± 0.707	5.25 ± 1.622	5.47 ± 1.598	1.142	0.327
My referees committee cares about whether or not I achieve my goals	5.00 ± 1.225	4.71 ± 1.805	5.27 ± 2.017	0.480	0.622
My referees committee is competent in doing his/her job	5.62 ± 0.768	5.13 ± 1.963	5.33 ± 2.093	0.319	0.729
My referees committee is fair to me	5.69 ± 1.109	5.04 ± 1.805	5.07 ± 2.120	0.644	0.530
My referees committee shows interest in the feelings of subordinates	4.77 ± 1.739	4.58 ± 1.530	4.87 ± 1.727	0.148	0.862
I like my referees committee	5.38 ± 1.261	5.21 ± 1.103	5.33 ± 1.633	0.88	0.916
My referees committee supports my attempts to acquire additional training or education to further my officiating career skills	5.54 ± 1.613	5.13 ± 1.393	5.67 ± 1.543	0.700	0.502

Results and Discussion

From the tabulated data, we can say that there is significant difference in the referees opinion regarding the officiating administration ignorance about any extra effort, care about a their general well being and satisfaction, provide genuine feedback, fails to learn about their career goals and aspirations and finally fails to provide opportunity to develop new skills in the National referees. However there is no significant difference in the in the referees opinion regarding the officiating administration support towards referees contribution, ignore complaints against them, cares little about their feelings and goals, acquire higher standards and finally the referees administrations fairness, competence. We can conclude that organization understands the referees role in the structural setup, valuing their practices and contributions, thereby retaining the officials from attrition from officiating ranks.

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Traditional Sports And Games In 21st Century:A Future Challenges

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Introduction

The history of sport can be traced back to the existence of human civilization itself. It is a key part of cultural identity, and a mechanism for the protection and promotion of cultural diversity. Thus, retaining knowledge of our traditional sporting practices is vital in terms of preservation and promotion of sport as an expression of Intangible Cultural Heritage. Worldwide there is a staggering cultural richness of indigenous, traditional, historical, and regional folk sports and games from different nations and ethnic minorities, many of which are fascinating not only for their differences, but also for the similarities of shared common features."Traditional and popular culture is the totality of tradition-based creations of a cultural community, expressed by a group or individuals and recognised as reflecting the expectations of a community in so far as they reflect its cultural and social identity; its standards and values are transmitted orally, by imitation or by other means. Its forms are, among others, language, literature, music, dance, games, mythology, rituals, customs, handicrafts, architecture and other arts"

"Games are the creation of a culture and the fruit of history. Literature and music, construction, ruins and food and drink are generally seen as community heritage; but we should not forget forms of enjoyment, of sharing the pleasure of acting together: we must not forget games! They, too, have emerged from the homeland: they reflect the deep social roots of different ways of behaving, of communicating with others and entering into contact with the environment. Linked to secular beliefs, performed according to traditional rites and ceremonies, inspired by practices from everyday life, physical games form part of cultural heritage, of cultural heritage generated by the body entering into play, generated by motor action. And this heritage is highly diverse and exuberant. This ethnic motor play represents culture in actions, a culture that is brought to life in each movement of the body. As such, games incarnate a place of memory, often ignored, but full of evocative symbolic Study of games can, therefore, offer interesting access to knowledge about societies".

The Threat of Globalization

Many traditional sports and games are already lost and those that have survived are in danger of disappearing, owing to the various tendencies of globalisation, and convergence in the rich diversity of sports heritage toward a small set of culturally homogenous sports. This has occurred because of the globalisation of communication networks by an ever decreasing number of media organizations whose legitimate aim is to gain as large a leadership or viewership as possible via minimum expenditure. This is achieved by appealing to the mass market which favours mainstream sports. In this environment, soccer has become the dominant world spectator and participative sport. The Beautiful Game" however is culturally homogenous and its identity is arguably indistinct.

In contrast, traditional sports almost exclusively have an amateur ethos and their associations lack significant financial resources, albeit with a small number of notable exceptions. In conjunction with this amateur ethos, traditional sport associations are altruistic in their support of other traditional sports. This rich collective heritage is managed by sporting organisations and governing bodies with few salaried

employees and relies on volunteers working tirelessly to retain and promote their sport as a social duty. In addition, traditional sports and their organisational structures are a central nurturing hub to retain, promote and pass on more widespread non-sporting aspects of cultural heritage (e.g. language, dance, music, storytelling).

3 . National and Local Heroes

Interest and participation in a particular sport or sports club is significantly de- pendent upon a person's affinity to their sporting heroes. But national sporting heroes are not only a means of promoting participation; they themselves are part of the cultural heritage. They have unique patterns of movement and skill execution, handed down through successive generations that have taken years to master. Unlike other forms of cultural heritage, there is no tangible artefact to hold (e.g. a sculpture, a relic) but the grace and precision of their movements are evident. A particular flick of the wrist, a strike of the ball, or a side-step on the field, the synergy between players all constitute unique movement signatures that are as worthy as the brush stroke of a painter. There is a need to capture and preserve these movement signatures. However, as heroes have become more international, the sport itself loses its attachment to a local/national cultural heritage and thus there is a clear need to continue to promote the local heroes within \grass roots" communities.

4. Current Technology:

To increase engagement, participation and interest in national, regional and local sports, and their associated cultural heritage, connections need to be forged between the sport and their potential membership. This may be achieved by creating interactive media of local/regional/national heroes that gains a person's interest, especially children. Cultural heritage would be further enhanced if information on these heroes is retained to span generations. Furthermore, the technology should encompass the principle that children want to play like" and play with" their heroes, strengthening traditional sports' already strong focus on participative sport irrespective of gender. Whilst capture of national heroes and other aspects of traditional games is non-trivial, the technology exists high-cost optical motion capture is used to great to capture subtleties of human motion, not just in sport, but also in the movie industry.

5. Promotion and Development of Traditional Sports and Games.

5.1 Recognition by local, regional and state institutions

The political institutions active in the different towns, counties, regions and even states have still not shown the necessary interest to guarantee the protection and promotion of traditional sports and games.

Making it possible to organised co-ordinated intervention by different ministries or departments whose brief covers traditional sports and games. To this end, master plans and strategic plans should be drawn up to revive and promote such activities. By way of example, the departments or ministries of culture, tourism and sport, education, social welfare and the family, environment and youth should be able to promote co-ordinated action. In a second stage, such co-ordination should also include the involvement of local authorities, universities, local organisations, private enterprises, federations, cultural associations, sports clubs and even such bodies as parents' associations.

5.2 Models for the institutional organisation of traditional sports and games

It is essential to establish a balance between spontaneous involvement in these sports and games and organised practice aimed at guaranteeing their conservation. Nonetheless, an important limitation exists: players' age. These are often quite elderly people, generally unused to following the patterns laid down by stable models of organisation. Amongst the different possible organisational models, there are two in particular that involve traditional sports and games:

Festivities are the main occasion where traditional sports and games are played. Although there are still many places where these activities play an important role in festive events, they have fallen into disuse in many more. It is therefore necessary to promote the revival and restoration of traditional sports and games to the festive environment as a way of encouraging cultural dialogue between people of different generations, gender and place of origin. This is also an excellent way of promoting active tourism. Moreover, the festive context provides the best way of conserving and projecting features of local culture found alongside traditional games.The conversion of the traditional game into a sport. Although this formula provides a stable organisational structure, it should not be understood to be the only path that can be taken. Unifying rules, standardising playing conditions (facilities, calendar, player categories, administration, etc) may cause a problem by globalising the activity and eliminating the signs of local identity that characterise such games. It is important to find a balance between the two formulas. Amongst the different options, it is proposed that cultural sections should be set up within traditional sports federations to promote coexistence between competition sport and other activities centred more on local traditions.

5.3 Attracting new players

Women and traditional games. The fact that women recently began to take up playing traditional sports and games invites us to think about how to ensure and increase their presence. Generally speaking, traditional games are very much integrating activities in which it is not necessary to establish categories or place restrictions on who can play. Nonetheless, these are very often practices that have been created through the thought processes of the hegemonic (male) gender and are more suited to the type of game that most interests men, that is to say, confrontation, strength or a mixture of strength and ability. This makes it necessary to take action, making conditions for playing these games more flexible and adapting them so that women, too, can find their own expression in such games, as well as introducing other forms in which female players can take part in larger numbers. We refer to dancing games, throwing games in which precision is required and strength is not a limiting factor (skittles and precision ball throwing games, for instance).

5. 4 Traditional games and education

Teacher training. At present, educators working at different academic levels still receive insufficient training in traditional games, both in official and leisure education. Primary school, secondary school and baccalaureate teachers, monitors at games centres and leisure facilities and, particularly teachers specialising in physical education… all need rigorous, specific training to become familiar with traditional sports and games and to understand their educational value.

5. 5 School-environmental projects.

The use of traditional games at schools should go beyond official classes of physical education and other subjects. Learning about the local area through games; visiting some natural space through games; taking part in local festivities; making and using the equipment needed to play a traditional game… these are just a few examples. Similarly, we should promote educational programmes involving local people, different members of the family, etc, to enable children to learn about games in their appropriate context. Here, too, it would be a good idea to link the school to initiatives organised by local facilities and organisations (museums, cultural associations, traditional sports federations, etc).

5. 6 Exchanges.

In view of the integrating and “universal” nature of traditional games, we should encourage participation in educational projects and exchanges of experiences amongst schools. Such exchanges can take place amongst schools in the same region or country, or with those in other European regions, promoting intercultural dialogue through knowledge and experience of the different circumstances in which traditional games are found.

5. 7 Promotion of studies.

The subject of traditional games continues to be one which receives little academic recognition, to which little importance is attached. Unlike other subjects of study, motor practices in general and traditional games in particular are anonymous expressions that require research to produce more information about them and the values they embody.

5. 8 Applied research.

The second stage is to promote research into the results obtained from using traditional sports and games for education, competition, recreation and tourism. Here, too, it would be useful to draw up plans for interdisciplinary action, carrying out studies from the different epistemological “branches/regions” (physiology, psychology, sociology, anthropology, pedagogy, motor etc). In this, the involvement of the

university is indispensable, as is the co-ordinated work of different ministries and departments forming part of regional, state and Indian administrations.

5. 9 Establishment of museums.

As occurs with other areas of traditional culture, we need to establish permanent museums devoted specifically to traditional sports and games. These museums would also act as centres promoting educational and recreational activities based on knowledge of traditional leisure culture.

5. 10 Use of the new Information and Communication Technologies (ICTs).

As far as possible, we should take advantage of all that today's "online society" has to offer. Web Sites launched by educational institutions, sporting organisations and associations offer a virtual forum enabling us to organise exchanges of information and experiences in the field. Similarly, we could share video and audio-visual products, in this way overcoming the problems people of a certain age can have to understand and express themselves in foreign languages. Probably the community spirit generated amongst groups from different European regions through the use of Internet and the new technologies would lead to the organisation of international exhibitions and meetings devoted to traditional sports and games, as already occurs in some Indian areas.

5.11 Publications.

Finally, we should mention the need to make the results of experiences and exchanges organised in the field of traditional sports and games more widely known. The most ambitious challenge facing us, once we have more information and research material available to us on the subject, may well be that of producing a Indian encyclopaedia of traditional sports and games. Subsequently, we should promote the publication of doctoral theses, studies, essays, etc, by editing books, monographs, articles in specialist journals and promotional works. On this point, it would be a good idea to create educational materials based on unified criteria for use in all European regions. Similarly, we should encourage the online publication of all materials relating to traditional sports and games on Internet and web sites.

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A Comparative Study On Team Performances Of National Road Cycling Championship

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Introduction:-

Cycling is a poor man's transport, hobby of rich man and medical activity for the old. In most of the cases, a child life starts with a cycle, two wheeled & tri-wheeled irrespective of his/her status of being from a rich, middle or poor family, hence, it may be mentioned that the cycling activity starts in the beginning of childhood and it becomes a sports at 10-12 years of age. Cycling as a sport was introduced in India with the efforts of Sh. Janki Das in mid thirties. The world's most famous cycling race, The Tour de France, began in 1903. It was a 2,500 Km. race taking place across 19 days, in six stages with riders expected to ride day and night. American, Lance Armstrong, has won the Tour de France seven years in row.

Cycling Federation of India organizes the national road championship once in year for all age groups but to have better talents to improve further, separate national championship for Elite, junior, sub-junior and youth category. Cyclists have opportunity to participate separate in rood national championship which were being held regular every year.

Statement of the Problem:-

The purpose of the comparative study was to find out on team/state better performances of the National road cycling championship 2016 and 2017.

Procedure:-

For this study, three age groups were taken each from Elite, Junior and Sub-Junior with youth groups spamming 2016 and 2017 in national road cycling men and women championship. Ordinary cycle race was excluded from the study. Elite category shall comprise riders aged 19 and above, Junior category shall comprise riders aged 17 and 18, Sub-Junior with youth category shall comprised riders aged 12 to 16. Gold, Silver and Bronze medal rankers from each group and each year was worked out. A comparative study was done considering total point of men/boys & women/girls team/state participants from each group in each year.

Statistical Analysis:-

The relevant data received from the results of the national road cycling championship 2016 and 2017 were evaluated according Gold medal = 5 Point, Silver medal =3 Point and Bronze medal =1 Point to statistical total point method and analysis.

Results and Discussion:-

In order to determine the significance of Elite, Junior and Sub-Junior with Youth group difference in the team/state performance of national road cycling championship 2016 and 2017. The results of team/state wise and year wise performance were compared. The comparative results are shown in table -1 to 6.

Table -1

Significance of difference between the team/state wise and year wise performance of Elite men national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
SSCB	2	1	1	14	Karnataka	3	-	1	16
Rajasthan	1	1	1	9	RSPB	1	2	1	12
Karnataka	1	-	2	7	SSCB	1	1	1	9

-Viewing table -1, It is seen that the SSCB (14Point) performances was achieved followed by Rajasthan (9 Point) second best and the third Karnataka (7 Point) best performances in 2016.
-It is also seen that Karnataka (16 Point) best performances was achieved, followed by RSPB (12 Point), there after comes the SSCB (9 Point) performances in 2017.
-In 2016, SSCB first place but in 2017 they have third place, so the down performances in 2017.
-In 2016, Karnataka is third place but in 2017 secured first place, so the best performances achieved.

Table -2

Significance of difference between the team/state wise and year wise performance of Elite women national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
Maharastra	2	1	-	13	RSPB	3	-	-	15
RSPB	2	-	-	10	Kerala	-	2	2	8
Kerala	-	1	2	5	Maharastra	1	-	1	6

Viewing table -2, It is seen that the Maharastra (13 Point) best performances was achieved followed by RSPB (10 Point) second best and the third Kerala (5 Point) best performances in 2016.
-It is also seen that RSPB (15 Point) best performances was achieved, followed by Kerala (8 Point), there after comes the Maharstra (6 Point) performances in 2017.
-In 2016, Maharstra first place but in 2017 they have third place, so the down performances in 2017.
-RSPB and Kerala team have a good performance achieved in 2017 comparative of 2016.

Table -3

Significance of difference between the team/state wise and year wise performance of Men Junior national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
Rajasthan	2	-	-	10	Haryana	-	2	1	7
Karnataka	1	-	1	6	Karnataka	1	-	-	5
Haryana	-	2	-	6	Mahrastra	1	-	-	5

Viewing table -3, It is seen that the Rajasthan (10 Point) best performances was achieved followed by Karnataka (6 Point) second best and the third Haryana (6 Point) best performances in 2016.
-It is also seen that Haryana (7 Point) best performances was achieved, followed by Karnataka (5 Point), there after comes the Maharstra (5 Point) performances in 2017.
-In 2016, Rajasthan first place but in 2017 they have did no place, so the down performances in 2017.
-Haryana and Karnataka team have a so so performances achieved in 2017 comparative 2016.

Table -4

Significance of difference between the team/state wise and year wise performance of women Junior national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
Kerala	1	2	-	11	Maharstra	2	1	-	13
Maharstra	1	-	2	7	Karnataka	1	2	2	13
Haryana	1	-	-	5	Aasam	-	-	1	1

Viewing table -4, It is seen that the Kerala (11 Point) best performances was achieved followed by Maharstra (7 Point) second best and the third Haryana (5 Point) best performances in 2016.
-It is also seen that Maharstra (13 Point) best performances was achieved, followed by Karnataka (13 Point), there after comes the Aasam (1 Point) performances in 2017.
-In 2016, Haryana team have a one god medal but in 2017 they have did no medal, so the down performances in 2017.
-Maharastra and Karnataka team have good performances achieved in 2017.

Table -5

Significance of difference between the team/state wise and year wise performance of Sub-Junior with youth boy national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
Haryana	1	1	-	8	Karnataka	1	2	2	13
Karnataka	1	1	-	8	Rajasthan	1	1	-	8
Rajasthan	1	-	2	7	J & K	1	-	1	6

Viewing table -5, It is seen that the Haryana (8 Point) best performances was achieved, followed by Karnataka (8 Point) second best and the third Rajasthan (7 Point) best performances in 2016.
-It is also seen that Karnataka (13 Point) best performances was achieved, followed by Rajasthan (8 Point), there after comes the J & K (6 Point) performances in 2017.
-In 2016, Haryana first place but in 2017 they have did no place, so the down performances in 2017.
-Karnataka and Rajasthan team have good performances achieved in 2017, comparative of 2016.

Table -6

Significance of difference between the team/state wise and year wise performance of Sub-Junior with youth girl national road cycling championship

Team/State	2016			Total Point	Team/State	2017			Total Point
	Gold	Silver	Bronze			Gold	Silver	Bronze	
Aasam	1	1	1	9	Karnataka	1	2	2	13
M.P.	1	1	-	8	Aasam	1	-	-	5
Maharastra	1	-	-	5	Maharastra	1	-	-	5

Viewing table -6, It is seen that the Aasam (9 Point) best performances was achieved, followed by M.P. (8 Point) second best and the third Maharastra (5 Point) best performances in 2016.
-It is also seen that Karnataka (13 Point) best performances was achieved, followed by Aasam (5 Point), there after comes the Maharastra (5 Point) performances in 2017.
-In 2016, Aasam first place but in 2017 they have second place, so the down performances in 2017. And in 2016, Karnataka team is did no place but in 2017 secured first place, so the good performances achieved.
-Karnataka and Rajasthan team have good performances achieved in 2017, comparative of 2016.
-Maharastra (5 Point) have a equal performances in 2016 and 2017 too.

Conclusion:-

The analysis of data revealed that there is a significant difference in group wise, team/state wise and year wise performances in national road cycling championship. It is established that various categories of cyclist different levels of relative strength. This may be probably due to the different nature of training and pre-requisite components for cyclist. Such results may be due to other factors such as different body type, different in the body composition, different geographic backgrounds, and cycle etc.

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The Colonial Construction Of The Tribe And The Tribal Area

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Introduction:

The nomenclature 'Scheduled Tribes', referring to adivasis or indigenous or tribal peoples of India, denote an identity category created by the State to understand a large, diverse and fluid population, spread across vast and remote swathes of the country. A primary motivation of the State in creating this category was to make this diverse population group tractable to governance, both administratively and politically. The colonial State first attempted such an identification and classification exercise, with far-reaching consequences. The instruments used in this exercise were numerous and sophisticated, and as argued below, a dangerous and lasting idea of the 'Other' underpinned such explorations. The post-colonial State merely took these categories of communities, and lumped them together (depending on their meeting various imprecise criteria) into the folder of 'Scheduled Tribes', for special dispensation under the Constitution of India. The colonial State, with the help of missionaries and early anthropologists, defined the tribe along racial and anthropometric lines. The resultant discourse saw the tribes as evolutionary primitives, both in relation to the mainstream Hindu religion and castes, as well as to 'normal' ways of living and being. In this view, tribes were subdivided into endogamous, exogamous and hypergamous groups, and among the exogamous many were totemistic. …below the upper crust of observances which Brahmanism and Buddhism enforce, there is a mass of more primitive beliefs, which form the real faith of the majority of the people. This jungle of diverse beliefs and cults has been classed under the unsatisfactory title of Animism, by which is meant the belief which explains to primitive man the constant movements and changes in the world of things by the theory that every object which has activity enough to affect him in any way is animated by a life and will like his own…Some rude stones piled under a sacred tree, a mud platform where a tiger has killed a man, a curiously shaped rock which is supposed to have assumed its present shape from some supernatural agency, are the shrines of the Animist. On tribal beliefs, the Imperial Gazetteer states, "[a]nimism in its purest form shows itself among the forest races in the centre and south of the Peninsula, and on the lower slopes of the Himalayas", while "Santals, Gonds, and Bhils, who occupy the hills south of the Gangetic valley", are falling under the sway of Hinduism, and "the fierce races, like the Nagas, who inhabit the lower ranges on the Assam frontier, have remained comparatively free from Brahman influence". Some passages reveal sheer alarm at the practices of the other: "Another remarkable instance of the tribal organization of the Dravidians is to be found among the Khonds of Orissa, once infamous for the human sacrifices which they offered to propitiate the earth goddess, with the object of ensuring good crops and immunity from disease and accidents."

The paper below shows how difficult the British found the Census enumeration process to be. It is apparent that even though they took cognizance of the proximity and fluidity between disparate social groups, this did not reflect in their Census. Instead, they codified and inscribed the groups into distinct colonial Census classifications based on clear cut racial and social identities: In a country where the accident of birth determines irrevocably the whole course of a man's social and domestic relations, and he must throughout life eat, drink, dress, marry, and give in marriage in accordance with the usages of the community into which he was born, one is tempted at first sight to assume that the one thing that he may be expected to know with certainty, and to disclose without much reluctance, is the name of the caste, tribe, or nationality to which he belongs. As a matter of fact, no column in the Census schedule displays a more bewildering variety of entries, orgives so much trouble to the enumerating and testing staff and to the central offices which compile the results. If the person enumerated gives the name of a well-known tribe, such as Bhil or Santal, or of a standard caste like Brahman or Kayasth, all is well. But he may belong to an obscure caste from the other end of India; he may give the name of a sect, of a sub-caste, of an exogamous sept or section, of a hypergamous group; he may mention some titular designation which sounds finer than the name of his caste; he may describe himself by his occupation, or by the Province or tract of country from which he comes. These various alternatives, which are far from exhausting the possibilities of the situation, undergo a series of transformations at the hands of the more or less illiterate enumerator who writes them down in his own vernacular, and the abstractor in the central office who transliterates them into English. Then begins a laborious and most difficult process of sorting, referencing, cross-referencing, and corresponding with local authorities, which ultimately results in the compilation of the Census Table XIII, showing the distribution of the inhabitants of India by caste, tribe, race or nationality.

The subset of wandering communities among the tribals—pastoral nomads, itinerant traders and others—attracted greater censure in terms of how they were perceived and categorised under the colonial rule. Much like the Gypsies of Romania, these nomadic people, officially the denotified tribes now, were viewed as hereditary criminals—the infamous Thagi, with proclivity to illegal activities such as dacoity. The devolution of occupation from father to son, here alluded to, which is so closely bound up with the caste system, is perhaps the most striking feature in the functional distribution of the people of India. The son of a priest is generally a priest; of a potter, a potter; and so forth. This is often the case even with criminal pursuits, such as thagi (now happily extinct) and offences against property. There are many wandering gangs of hereditary criminals whose ostensible means of livelihood are basket making, fortune-telling, juggling or peddling; but who really subsist on the profits of cattle lifting, and of thefts and dacoities based on information gleaned by their women while plying their professed trade. The supervision of these gangs is one of the recognized duties of the police. Throughout India there are castes and tribes who live largely by the commission of crime, especially thefts, robberies, and cattle-lifting, and whose operations have been facilitated by the development of road and railway communications.

A special watch is kept over the doings of these sections of the community, and various Acts have been passed for the purpose of reclaiming the most dangerous among them, and of protecting society against their depredations. A powerful agency for the detection of habitual offenders has been secured in the system of recording and classifying the finger-tip impressions of persons guilty of grave crime. The colonial State believed that control had to be exercised over these wandering groups, through restraining legal and penal injunctions, to maintain 'law and order', as the danger of them becoming a rebel force threatening the State was always present. Between 1830 and the beginning of the 20th century, such 'criminality' was perceived to have been stamped out: "The existence, till very lately, of a 'Thagi and Dakaiti department' bore testimony to the manners of other times, but although the department long retained its old title, its duties changed with the progress of peace and civilization.

The Colonial Construction of the Tribal Area

For the colonial power, underpinning the notions of tribal identities and communities were the beliefs about their sequestered habitation, living as they were in remote, hilly and forested terrain. A 'Heart of Darkness' view, indicated by the discourse referring to these locales as the "wild and sparsely inhabited Native States" of the Central Provinces, was reinforced by Gazetteer reports of epidemics of cholera, malaria fever and grave famines affecting tribes more than others.

For example: “improvident aboriginal tribes sustained a far greater diminution than the Hindus, among whom again the low castes suffered more than the high.” Reports of surveyors succumbing to diseases in these parts abounded. Mention may be made of another topographical survey, in progress from 1853 until 1877, which for nearly twenty years was superintended by a single man—Colonel Saxton. The scene of his labours lay in the deadly jungle-covered tracts from Chota Nagpur to the Godavari, and embraces the Ganjam and Vizagapatam Agencies, and a portion of the Central Provinces with Bastar, Jeypore, and their dependencies, an area of over 70,000 square miles. The history of this survey is one continuous tale of sickness and death due to fever, and of active opposition to its progress by the wild tribes who inhabit that area. Of the many persons employed on it Colonel Saxton alone appears to have passed, though not unscathed, through the long ordeal. In reaction to creeping market-oriented forays into their domains and consequent exploitation by usurping colonial State officials, landlords and moneylenders, tribal uprisings and rebellions abounded during the course of the 19th and early 20th centuries (the Santhal Hul of 1855-1856, the Birsa Ulgulan of 1895-1900, the Kalahandi rebellion of 1882, and the Bastar Bhumkal of 1910, for instance). Ironically, for the colonial State, these rebellions contributed to ideas of savagery and barbarism, notions that were conveniently used for violently quelling such resistance.

Sometimes, various tribes (for instance, those of Assam) were reported as warring against the State: “To the south and south-east there are the Naga Hills, inhabited by many fierce tribes whom we are slowly winning to civilization, and each possessing a language of its own. Such are Angami, Sema, Ao, Lhota, and Namsangia, with fourteen or fifteen others. None of them, of course, has any literature, and of many of them little but the names and a few words are known. The Angami Nagas are those with whom we have fought most, and with whom we are best acquainted.” Throughout this period, forests—integral to the lives of the adivasis—started getting closed off to free access, and their customary and traditional user rights were systematically infringed upon. The reservation of forests, dictated by imperial strategic needs (initially for teak and subsequently for timber and other produce), began with the establishment of the Forest Department in 1864, and the Indian Forest Act of 1878, crystallising into a more draconian form of the Indian Forest Act of 1927. Demand ratcheted up over time, for example with the construction of the railways. Shifting or jhum cultivation, which was the predominant agricultural practice among these communities in northeastern India, especially the hilly and forested expanses, was seen as uncivilised and something that had to be stopped in favour of getting them to settle on lesser lands with lower commercial value, and work the plough.

With the emergence of the language of modernisation, industrialisation and technology, these so-called primitive, uncivilised and backward areas became sources of either inputs (labour, etc.) or revenue or both for the Empire’s capitalist engine. People started to migrate—from the Central Provinces to either tea plantations in the northeast or to mills and coal-mines in Bengal: The great tea industry of Assam has created a demand for labour which the local supply is wholly unable to satisfy, and the planters are thus forced to seek for coolies elsewhere. The consequence is that Assam contains three quarters of a million immigrants, or one-eighth of its total population. These belong for the most part to the hardy aboriginal tribes of the Chota Nagpur plateau in Bengal and the adjacent parts of the Central Provinces and Madras; and, on the expiry of the labour contracts which they execute on coming to the Province, large numbers settle down as cultivators, or as carters, herdsmen, and petty traders [while there are those who] seek employment in the mills of Calcutta and Howrah and the coal-mines of Burdwan, and as earth-workers, palanquin-bearers, and field-labourers all over Bengal proper, where the indigenous inhabitants are too well off to be willing to serve for hire. As for forest revenue and other forms of cess (land etc.), “there … [was] no considerable source of Imperial taxation now [1909] in existence which had not already been imposed in 1860, and in most cases the increase in the total receipts … [had] accrued in spite of reductions in the rate of assessment.” In the colonial justification, however, “The Forest department … [had] looked to the preservation and improvement of this valuable source of wealth rather than to the raising of an immediate large income, but its operations … [had] been a source of increasing profit, which would have been greater of late years but for the effect of famine.” Under “miscellaneous revenue”, excise was “derived from the manufacture and sale of intoxicating liquors, hemp drugs, and opium, all of them commodities whose use must, in the interest of the people, be restrained within reasonable limits”.

Further, “country spirit accounted for much of the total receipts from liquors, and … [was] prepared by native methods in Bengal, Assam, the United Provinces, the Central Provinces, Sind, the Frontier Province, and Baluchistan”. In time as the colonisers spread their tentacles into adivasi areas, although never wholly successfully, revenue relations got established between certain communities and the

administration, with some tribes in Assam, the Central Provinces and elsewhere being given licenses to brew alcoholic beverages. In terms of governance, however, isolationist policies were the order of the day, especially in areas with high concentrations of adivasis. Even though notions of marked ethnic closure were overdrawn—tribal villages being identified with tribal communities only and not as a more heterogeneous group that may include both tribes and castes as social groups—the over-arching belief was that the adivasis were not part of mainstream Hindu society and were meant to be kept apart. It is clear that the colonial State had no problems disrupting the tribal economy to further the statist and commercial interests of empire, at least to the extent it was possible to do so by circumventing tribal resistance. However, at the same time, there was a parallel current of paternalism that also marked the relation between the adivasis and the State. The lens through which the adivasis were viewed, perhaps tinged with romanticism, showed them as privileging their unique culture (inter alia, with discernible equality for their women folk) over the economic, and taking seriously the pursuit of happiness and the 'pleasure principle'. Further, they were seen to be having an innocent economic psychology, a lack of functional specialisation and deeply non-hierarchical organisation. Hence, they were to be protected from being subsumed under the dominant and very different society, from aggressive accumulation and structurally embedded hierarchy.

The colonial State therefore, driven mostly by circumspect pragmatism but somewhat by romantic idealism, especially towards the tribals, had alternative arrangements for governance in the deregulation Provinces (territories acquired later, including Central Provinces, Assam, Punjab, Burma and Oudh, as opposed to the regulation Provinces of Bengal, Madras, Bombay and Agra). Significant differences existed over higher administrative posts in tribal regions not being reserved wholly for the Indian Civil Service; the executive head of the district was termed a deputy commissioner, and not collector; all provinces, except Oudh, did not have an independent Board of Revenue; the district magistrates could exercise more criminal jurisdiction; and in the less advanced deregulation Provinces, often administrative and judicial functions were combined. The Scheduled Districts Act of 1874 signalled further that while tribal locales were to be treated administratively as a geographical unit, they were supposedly subject to fewer and unique laws than those imposed elsewhere. To conclude, the Imperial State's treatment of these peoples may be understood at two levels: one, as an attempt to provide a definition of a tribal person; and two, to neatly delineate a tribal area. Each of these missions was portrayed as a 'civilising' one, even while the reasons instrumental for undertaking these missions were driven by the Empire's economy and security-related needs and interests. We turn next to see how independent India has chosen to see and treat the tribal people.

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Effect of Weight Training Exercises for development of Upper Body Muscle Strength among Foot Ball Players of Osmania University

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Abstract:
Weight training is a common type of strength training for developing the strength and size of skeletal muscles.Sports where weight training is central are bodybuilding, weightlifting, powerlifting, Highland games, shotput,, and javelin throw.The purpose of the present study to find out the effect of Weight training exercises for the development of upper body muscle strength among football Players of Osmania University. The sample for the present study consists of 20 Male Foot Ball Players of Osmania University out of which 10 are experimental group and 10 are controlled group. Weight training exercises 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 on Pull Ups to the experimental group and controlled group.This study shows that due to the weight training exercises there is a improvement of experimental group in upper body muscle strength.It is concluded that due to weight training exercises there will be improvement in upper body muscle strength among Foot ball Players.
Key words:Weight training,shoulder strength,speed etc.

Introduction:
Weight training is a common type of strength training for developing the strength and size of skeletal muscles.Sports where weight training is central are bodybuilding, weightlifting, powerlifting, Highland games, shotput,, and javelin throw. Strength training is an inclusive term that describes all exercises devoted toward increasing physical strength. Weight training is a type of strength training that uses weights rather than elastic, Eccentric Training or muscular resistance to increase strength. Weight training usually requires different types of equipment; most common are dumbbells, barbells, and weight machines. Various combinations of specific exercises, machines, dumbbells, and barbells allow weight trainers to exercise body parts in one or more ways. Some exercise approaches use only bodyweight exercises such as press-ups that require no equipment, while others such as a pull-up require no weights but do require a pull-up bar that is strong enough to support the weight of the trainer.
Weight training is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance, and size of skeletal muscles.When properly performed, strength training can provide significant functional benefits and improvement in overall health and well-being, including increased bone, muscle, tendon and ligament strength and toughness, improved joint function, reduced potential for injury, increased bone density, increased metabolism, improved cardiac function, and elevated HDL (good) cholesterol.. Strength training is primarily an anaerobic activity, although some proponents have adapted it to provide the benefits of aerobic exercise through circuit training.

Sports where weight training is central are bodybuilding, weightlifting, powerlifting, Hammer Throw, shotput, discus throw, and javelin throw. Many other sports use strength training as part of their training regimen, notably football, wrestling, rugby, track and field, rowing, lacrosse, basketball, andhockey. Strength training for other sports and physical activities is becoming increasingly popular.

Methods and Materials:

The sample for the present study consists of 20 Male Foot Ball Players out of which 10 are experimental group and 10 are controlled group of Osmania University . Weight training exercises are given three times a week for six weeks for experimental group and controlled group were given general training of Foot Ball.

The following are the weight training exercises were given three times a week for six weeks to the experimental group foot ball Players.

Biceps Curls
Triceps Curls
Bench Press
Back Press
Bent Over Rowing
Up right Rowing
Wrist Curls
Half Squats
9. Good Morning.
10. Side Wards Bend
11. Heel Raising with Weights
12. Leg Press
13. Push Ups
14. Sit Ups
15. Hack Squat
16. Dumbell Exercises

The above exercises used as per the requirement in the three sessions in a week. The controlled group were given general training of Foot ball.To assess the Shoulder Strength the Pre Test and Post Test the following tests were conducted

1.Pullups

Results and Discussion:

Table –I showing the Pull ups Test of Experimental and Control Group of Foot Ball Players in Pre and Post Test.

Pull ups	N	Pre Test	Post Test	t	Sig.
Experimental	10	10.10	12.60	6.19	0.000
Control	10	10.10	9.00		

The Experimental Group Pre Test Mean Score in Pull ups is 10.10 compare to post Test Score is 12.60,there is a improvement of mean score 2.50 between Pre Test to Post Test due to Weight Training. The Control Pre Test Mean Score in Pull ups is 10.10 compare to post Test Score is 9.00,there is a decrease of mean score timing 1.10 between Pre Test to Post Test due to General Training.

Conclusions:

It is concluded that due to the weight training there is improvement in upper body muscle strength among Foot ball Players

Recommendations:

It is recommended that similar studies can be conducted in all sports and games.

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Tribals In Globalization

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Abstract:
The forest occupiers a central position in social group culture and economy. The social group manner of life is incredibly abundant determined by the forest right from birth to death. In spite of the protection given to the social group population by the constitution of Asian nation, tribals still stay the foremost backward grouping in Asian nation. The policy of liberalization and also the new state perceptions of utilization of resources are diametrically against the adivasi worldview of resource exploitation and this divide has solely widened additional with the intrusion of globalization's market destined philosophy of development. The gains of globalization have to date accumulated to those that have already got education and talent advantage. For the Tribals, globalization is related to inflation, loss of job security and lack of health care. Thus the govt ought to frame Special policy and programmes that are needed to handle the redress these variations particularly on the context of globalization. Once we arrange for social group development, we've to take these variations, take a special note of their things and capabilities and supply them facilities to develop on the road they require to require.
Key words:Tribals, Social Group, Globalisation and Forest

Introduction

The social group population of Bharat is around eight.6 p.c of the full population of the country that is larger than the other country within the world. The full social group population in Bharat is 104,281,034. During this rural population is ninety three, 819,162 whereas the urban population is ten, 461,872. The social group population is increasing in conjunction with the Indian population however at as a rate not up to that of general population. The final population from 1951 to 2011 has increased by 849.46 millions. The social group population from 1951 to 2011 increased by eighty five.1 millions. The share of social group population to total population has increased solely three.31 p.c from 1951 to 2011. The forest occupies a vital place in social group life and economy. The social group means of life is extremely a lot of settled by the forest right from birth to death. It's ironical that the poorest folks of Bharat reside within the areas of the richest natural resources. Past history shows that, tribals are pushed to corners thanks to economic interests of assorted dominant teams.[i]

WHO area unit TRIBALS?

The word "tribal" or Adivasi brings to our mind an image of half-naked men and girls, with arrows and spears in their hands, feathers in their heads, Associate in Nursing speaking anunintelligible language, their lives typically combined with myths of savagery and pattern. Even once majority of the communities within the world unbroken ever-changing their life-styles, competed with one another and developed materialistic instincts to stay pace with the "progress" of the planet, there have been communities still living in line with their ancient values, customs and beliefs. The consumptive mental attitude of the thought society created these communities recede typically into forests and high-altitude Mountains, wherever they might still sleep in peace with Nature and their pure surroundings. because the supposed civilized communities of the thought society neither may comprehend the values and ideals of those communities nor had the patience to grasp their lifestyles, the thought world branded them multifariously as natives, uncivilised individuals, Aboriginals, Adivasis, Tribals, autochthonic individuals etc. In India, we

have a tendency to principally refer them as Adivasis/Girijans. In spite of the fierce treatment by the "civilized" men and also the socio-economic perils moon-faced by these communities everywhere the planet, the tribals still sleep in the continents of Africa, Asia, North and South America and Australia.

DEFINING A TRIBE

The word 'tribe' is usually used for a "socially cohesive unit, related to a territory, the members of that regard them as politically autonomous" (Mitchell, 1979: 232). typically a tribe possesses a definite non-standard speech and distinct cultural traits. The Imperial lexicon of Republic of India, 1911, defines a tribe as a "collection of families bearing a standard name, speaking a standard non-standard speech, occupying or profession to occupy a standard territory and isn't sometimes endogamous tho' originally it'd are so".[ii]

Another definition of a tribe by D.N. Majumdar is that "a tribe may be a assortment of families or cluster of families bearing a standard name, members of that occupy constant territory, speak constant language and observe bound taboos relating to wedding, profession or occupation and have developed a well-assessed system of reciprocity and mutuality of obligations". in step with R.N. Mukherjee, 'A tribe is that human cluster, whose members have common interest, territory, language, social law and economic occupation'.

From the study of the social science literature, it seems that the term tribe has been used for those teams of groups of people, whose place of residence is set in remote areas like hills, forest, ocean coasts and islands; and whose variety of life is kind of completely different from this day civilized men. social science and social group study area unit closely connected. social science as a discipline of subject and analysis has acquire existence to check the native autochthonic individuals of Africa, Asia, Australia and New world. It's as a result of this undeniable fact that some students criticize social science as 'Tribalogy'. Like different societies, society is additionally not static, rather is kind of dynamic. the speed of amendment in society is incredibly slow. that's why they need been backward and poor as compared to people. Since they need been materially backward and economically poor, makes an attempt are created by the govt. to develop them. Today, the govt. of all places of the planet area unit paying special attention towards the event of the social group, i.e., one finds the existence of evoked or planned amendment in society.

Indian situation

The forest occupies a central position in social group culture and economy. The social group means of life is incredibly abundant settled by the forest right from birth to death. Republic of India is additionally characterized by having second largest social group (Adivasis) population within the world. It's ironical that the poorest individuals of Republic of India reside within the areas of richest natural resources. Traditionally, tribals are pushed to corners as a result of economic interests of assorted dominant teams. In up to date Republic of India, the necessity for land for development remains forcing them, albeit this point to integrate with thought. According the 2011census, tribals represent eight.2%of the entire population of the country. The social group individuals of Republic of India area unit referred to as "Scheduled Tribes" within the Indian Constitution. In India, 461 ethnic teams area unit recognized as regular Tribes, and this area unit thought of to be India's autochthonal peoples. In earth Republic of India, the regular Tribes area unit sometimes remarked as Adivasis, which accurately suggests that autochthonic peoples. There are, however, more ethnic teams that will qualify for regular Tribe standing however that isn't formally recognized. Estimates of the entire variety of social group team's area unit as high as 635. in step with the social science Survey a complete of four,635 communities area unit currently to be found in Republic of India. Out of this total, 'tribal' or autochthonic community's variety 732. the biggest concentrations of autochthonic peoples area unit found within the seven states of north-east Republic of India, and also the supposed "central social group belt" stretching from Rajasthan to state.2 over [*fr1] the regular Tribes population is focused within the States of Madhya Pradesh, Chhattisgarh, geographical area, Odisha, Jharkhand and Gujarat (the distribution of ST Population in numerous States/UTs is bestowed in Annexure one, 2, 3 and 4).. There are unit over 700 regular Tribes notified beneath Article 342 of the Constitution of Republic of India, touch completely different States and Union Territories of the country. several tribes area unit gift in additional than one state. the biggest numbers of regular tribes area unit within the states of state (i.e. 62). The synonyms of those 700 around tribes {are also|also area unit|are} vary many a times and are listed within the Schedule. whereas the social group population in some states is low once calculated because the share of the entire social group population of Republic of India however it constitutes the bulk inside the state or UT itself (e.g. in Lakshadweep, Mizoram, Nagaland, Meghalaya, Arunachal Pradesh and Dadra & Nagar Haveli).[iii]

Tribals area unit among the foremost disadvantaged and laden sections of Republic of India. Gender bias and gender oppression has meant that Adivasi girls area unit worst affected. Half the adivasi individuals don't have land. Even after they own some land, in most cases they will besolely marginal holdings. Poverty, deprivation and currently the reduction of state expenditure on basic medical health facilities is mirrored within the fully poor health condition of adivasi girls and youngsters. Republic of India has many laws and constitutional provisions, like the Fifth Schedule for earth {india|India|Republic of Republic of India|Bharat|Asiancountry|Asian nation} and also the Sixth Schedule sure enough areas of north-east India, that acknowledge autochthonic peoples' rights to land and self-governance. The laws geared toward protective autochthonic peoples have, however, various shortcomings and their implementation is way from satisfactory.

According to the National Crime Records Bureau's report (NCRB), a complete of five, 885 cases of atrocities against autochthonic peoples/tribals were according within the country throughout 2011, as compared to five,425 cases in 2010, showing a rise of eight.5% over the year. Autochthonic girls and youngsters still suffer from numerous kinds of violence, as well as killing, rape and torture by non-tribals, security forces and members of the armed opposition teams in armed conflict things. The fifth Schedule and sixth Schedule to the Constitution of Republic of India give tight protection of the land happiness to the social group peoples. Additionally, at the state level, there's a overplus of laws prohibiting the sale or transfer of social group lands to non-tribals and also the restoration of alienated social group lands to them. However, the laws area unit either not properly enforced or they're manipulated to facilitate the transfer of social group lands to non-tribals.

Since the adoption of recent policy (NEP) in 1991 the management of United Nations agency in several of the comets and schemes regarding forests is incredibly obvious. These have the only aim of gaining unrestrained access to the natural resources though' it's disguised beneath engaging names like Joint Forest Management (JFM), restoring forests, conserving bio diversity etc. The forest 'Protection Committees' to be fashioned beneath JFM area unit in impact controlled by the forest department for his or her secretaries need to be forest rangers. Worse, in Andhra Pradesh, the JFM has business as its third partner facilitating faster privatization. Furthermore forests area unit being opened to non-public entrepreneurs within the name of promoting touristy. Eco touristy is promoted within the adivasi areas by the state governments. This is often not solely movement threats to ecology and destroying autochthones cultures however is additionally increasing the danger of sex touristy. Touristy too plays a task in antagonistic adivasis from their lands. Adivasi communities living close to Borra caves in Andhra Pradesh became mere contract employees as they need been seized by the govt.

Meaning of Tribe

The term 'tribe' denotes a gaggle of individuals living in primitive or barbarous conditions. Article 366(25) of Indian constitution refers regular tribes as those communities who square measure regular in accordance Article 342 of the Constitution. this text says that solely those communities who are declared associate degree of itself} by the President through an initial public notification or through a resultant amending Act of Parliament are going to be thought-about to be regular Tribes. The essential characteristics, initial ordered down by the Lokur Committee, for a community to be known as regular Tribes square measure[iv]–

a) Indications of primitive traits;
b) Distinctive culture;
c) Timorousness of contact with the community at large;
d) Geographical isolation; and
e) Retardation

What is Globalization?

Globalization is that the free movement of products, services, capital, folks and knowledge technology across national boundaries. It's driven by integrated international economy that influences each, economic also as social relations at intervals and across countries. Gap of AN economy will increase competition internally also as outwardly, results in structural changes within the economy, alters client preferences, lifestyles and demands of voters. Whereas thought economists counsel that method} process may be a interaction for equalizing precipitate financial gain between nations, others say that the developing countries square measure exposed to threats of additional aggravation and social {process} within the process.[v]

Globalization, these days, isn't being warmly welcome significantly within the developing countries. Fears regarding globalization are long current. As Henry M. Robert J. Samuelson puts it "globalization may be a

double –edged weapon. It's a arguable method that assaults national sovereignty, erodes native culture and tradition and threatens economic and social stability." It brings instability and unwelcome modification exposes employees to competition from imports and undermines government.(Nishi K.Dixit 2006)

Effect of globalization on Tribals

The impact of globalization is strongest on these populations maybe quite the other as a result of these communities haven't any voice and square measure so simply swept aside by the invisible hand of the market and its proponents. Globalization isn't just an issue of social process for autochthonic peoples it's a multi-pronged attack on the terribly foundation of their existence and livelihoods, for example:

• Autochthonic folks throughout the planet sit on the "frontlines" of globalization's expansion; they occupy the last pristine places on earth, wherever resources square measure still abundant: forests, minerals, water, and genetic diversity. All square measure fiercely wanted by international firms, attempting to push ancient societies off their lands.

• New advances in technology, the reorientation towered export-led development, and also the imperatives of pleasing international monetary markets square measure all driving forces within the extermination of unnumbered native communities that substitute their means.

• ancient sovereignty over searching and gathering rights has been thrown into question as national governments bind themselves to new international economic treaties.

• New trade and investment agreements, that square measure gap up antecedently inaccessible territory to industrial extraction of natural resources, has forced autochthonic peoples to defend their homelands below AN invasion of unexampled rate and scale: huge dams, mines, pipelines, roads, energy developments, military intrusions all threaten native lands.

• International rules on the patenting of genetic resources via the global organization has created potential the privatization of autochthonic peoples' genomes, the biological diversity upon that they rely, and also the terribly information of however that diversity could be used commercially.

• National governments creating choices on export development ways or international trade and investment rules don't consult native communities.

Globalization a Threats to Constitutional safeguards of Tribals

The Fifth and Sixth Schedules of the Constitution were specifically dedicated to the protection of the hundred million tribes unfold across the country. The Indian Constitution provides legal safeguards to adivasi communities and everyone its policies concerning utilization of resources, whether or not land, water or forests supported social equity instead of on economy. But the method of globalization has invaded Bhareat too since the introduction of the New policy of the nineties, that may be a complete reversal of the welfare and socialistic essence of the Indian Constitution. The protecting and welfare role to date contend by the state suddenly shrink once the state set to create accessible these natural resources to international and personal powers. During a globalised state of affairs, it's the market and not community that is that the focal player. The influence of Powerful international lobbies created pressure on the governments. These results in transfer management over resources from Adivasis to personal and international business stakeholders , legitimate governments like Bhareat permitting themselves to endure Constitutional changes to the impairment of their constituent communities.

All laws and policies regarding regular Areas – the land transfer rules, the Forest Act, the surroundings protection Act, the Land Acquisition Act square measure all below immediate threat of repeal, dilution or change,. Whereas these laws clearly portray the necessity for defense {of folks of individuals} and resources the new polices necessitate exploitation of resources at the price of social group people. These contradictions between law and polices square measure resulting in industrial lobbying for change of the laws and also the terribly change of state of the Constitution.[vi]

Threats of recent Economic policies on Tribals:

The new economic policies have serious impact on the adivasi lives whose right over access to natural resources, bread and butter opportunities, right to primary education and health, protection from atrocities and human rights abuses and also the right to uphold their ancient and customary practices, square measure below series threat as a result of the changes in laws and policies.[vii]

The most serious threat to the adivasi folks on the country nowadays are that the pressure on the Fifth Schedule. Each Central and several other state governments' square measure seriously creating efforts to amend the laws prescribed below Fifth Schedule and their corresponding state laws so as to permit non-public and company players to require over social group and forest lands.

Violation of the Fifth Schedule has occurred in many countries like in Andhra Pradesh wherever the Land Transfer Regulation Act was unheeded whereas giving mining leases in regulareareeas to personal firms.

Non-public mining has been going down in Rajasthan, M.P, Odhisa, geographical area and different Fifth Schedule states.

One of the ways that of globalisation in Bhareat is withdrawal or privatization. Several Public sector Enterprises squaree measure being sold-out off to personal sectors with the tareget of raising revenues to fulfill the business deficits and to enhance potency. Profit creating enterprises like BALCO, that squaree measure within the social group belt, aree privatized. Public Sector Enterprises within the social group belt were useful to social group folks giving them employment and bread and butter. Privatization of those enterprises can adversely have an effect on the social group folks and disturb the regional balance in terms of industrialization.[viii]

The new Industrial policy paved the means for social group Land alienation. This leads to the alienation of social group lands for numerous purposes like construction dams, mining comes, putting in of life sanctuaries, construction of presidency infrastructure and encroachments by non tribals. Whereas the adivasis are displaced and pushed into the fringes of globalization, the natural resources were victim to massive scale destruction directly for business functions and indirectly by the non tribals. As a result the tribals all over up as trash within the globalised policies unable to access the resources that were their life sustaining forces or to contend with the thought society to be absorbed into alternate economies. Those absorbed within the new industries and come were lowest compared to the extent of displacement and also the destruction of ancient bread and butter.

Conclusion

Tribals square measure a parent of the Indian society, at a similar time they're completely different. Age recent exploitation and repression of the tribal's, have cut them removed from the most stream of socio-economic development of the country as a full. The social group population is known because the aboriginal inhabitants of our country. They're most vulnerable section of our society living in natural and pure encompassing far-flung from civilization with their ancient values, customs and beliefs. The gains of globalization have to date accumulated to those that have already got education and ability advantage, easier market access and possession of assets to be used as collateral to access credit. For the tribal's, globalization is related to economic process, loss of job security, lack of health care and social group development programmes. Globalization may additionally weaken the constitutional protections, in terms of education and job reservations given to tribals. Thus the govt. ought to frame Special policy and programmes that square measure needed to deal with the redress these variations particularly on the context of globalization. After we arrange for social group development, we have to treat these variations, take a special note of their things and capabilities and supply them facilities to develop on the road they require to require

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